

# UNIVERSITY OF TORONTO



## CALENDAR 1927-1928

THE UNIVERSITY OF TORONTO PRESS  
1931





# TABLE OF CONTENTS

	PAGE
Administrative Officers.....	9
Calendar .....	12
Board of Governors.....	21
Senate .....	22
Officers of Instruction.....	27
Constitution and Administration of the University.....	86
Matriculation—General Regulations.....	92
Matriculation Scholarships and Bursaries.....	105
Matriculation, Pass, Curriculum.....	118
Matriculation, Honour, Curriculum.....	135
Faculty of Arts .....	151
Courses leading to the Degree.....	152
Procedure for Admission .....	155
Entrance.....	156
Registration and Enrolment.....	157
Students on Probation .....	158
Regulations relating to Students in Attendance.....	158
Physical Training.....	160
Equivalent Examinations, First Year.....	160
Teachers' Course for Degree.....	161
Conditions for Academic Standing.....	163
Examinations.....	168
The University and the Colleges.....	170
The Library.....	170
Royal Ontario Museum.....	171
Hart House.....	171
Hart House Theatre.....	172
University College Women's Union.....	172
Victoria College Women Students' Union.....	173
Residences.....	173
Students' Administrative Council.....	178
Women Students' Administrative Council.....	178
Joint Executive, Students' Administrative Councils.....	178
Athletic Association.....	178
Women's Athletic Association.....	179
Canadian Officers' Training Corps.....	179
Academic Standing for High School Assistant's Certificate.....	180
Pearson Kirkman Marfleet Lectureship.....	181
University of Oxford.....	182
University of Cambridge.....	182
University Fees.....	184

	PAGE
College Fees.....	187
Fees for Occasional Students .....	189
Prizes.....	191
Medals .....	198
Scholarships, Fellowships and Bursaries .....	202
Courses of Instruction—Greek.....	226
Courses of Instruction—Latin.....	228
Courses of Instruction—Greek and Roman History .....	230
Courses of Instruction—Oriental Languages.....	230
Courses of Instruction—Ancient Oriental History.....	233
Courses of Instruction—English.....	233
Courses of Instruction—German.....	237
Courses of Instruction—French.....	239
Courses of Instruction—Italian.....	242
Courses of Instruction—Spanish .....	244
Courses of Instruction—History.....	245
Courses of Instruction—Political Economy.....	251
Courses of Instruction—Law.....	256
Courses of Instruction—Anthropology.....	258
Courses of Instruction—Accounting.....	258
Courses of Instruction—Philosophy .....	259
Courses of Instruction—Psychology.....	265
Courses of Instruction—Mathematics.....	267
Courses of Instruction—Mechanics.....	271
Courses of Instruction—Actuarial Science .....	271
Courses of Instruction—Astronomy.....	272
Courses of Instruction—Physics.....	273
Courses of Instruction—Biology.....	281
Courses of Instruction—Botany .....	286
Courses of Instruction—Anatomy.....	290
Courses of Instruction—Biochemistry.....	291
Courses of Instruction—Food Chemistry.....	292
Courses of Instruction—Physiology.....	293
Courses of Instruction—Chemistry.....	294
Courses of Instruction—Geology and Palæontology .....	297
Courses of Instruction—Mineralogy and Petrography.....	299
Courses of Instruction—Household Science.....	300
Courses of Instruction—Religious Knowledge.....	302
Courses of Instruction—Art and Archaeology.....	304
Courses of Instruction—Military Studies.....	304
Prescription for Courses.....	306
Pass Course.....	306
Time-Table .....	308
Honour Course in Classics.....	312
Honour Course in Greek and Hebrew.....	313
Honour Course in Oriental Languages.....	314
Honour Course in Hebrew and Ancient History.....	316

	PAGE
Honour Course in French, Greek and Latin.....	318
Honour Course in Modern Languages.....	320
Honour Course in English and History.....	321
Honour Course in Modern History.....	323
Honour Course in Political Science.....	324
Honour Course in Philosophy.....	326
Honour Course in Philosophy (English or History Option).....	328
Honour Course in Psychology.....	330
Honour Course in Mathematics.....	330
Honour Course in Mathematics and Physics.....	332
Honour Course in Physics and Chemistry.....	334
Honour Course in Science (First Year).....	336
Honour Course in Physics.....	336
Honour Course in Biology.....	337
Honour Course in Physiology and Biochemistry.....	339
Honour Course in Biological and Medical Sciences.....	340
Honour Course in Chemistry.....	341
Honour Course in Chemistry, Mineralogy and Geology.....	342
Honour Course in Geology and Mineralogy.....	344
Honour Course in Science (General).....	345
Honour Course in Household Science.....	346
Honour Course in Household Economics.....	347
Course for the Degree of Bachelor of Commerce.....	349
Summer Session.....	355
University College.....	369
Victoria College.....	375
Trinity College.....	391
St. Michael's College.....	395
Faculty of Medicine.....	399
Entrance.....	400
Registration.....	402
Fees.....	403
Instruction.....	407
Options of Primary Years.....	407
Options of Final Years.....	409
Subjects of Instruction.....	410
Combined Course in Arts and Medicine.....	413
B.Sc. (Med.) Course.....	413
Examinations.....	414
Regulations for Licence to Practise.....	418
Regulations for the Degrees of Doctor of Medicine and Master of Surgery.....	420
Fellowships, Scholarships and Bursaries.....	422
Courses for Graduates in Medicine.....	429

	PAGE
Special Graduate Courses .....	429
Short Courses in Radiology .....	430
Extension Lectures.....	430
Curriculum for the Diploma of Public Health.....	430
Curriculum for the Diploma of Radiology.....	432
Courses of Instruction.....	435
Banting and Best Chair of Medical Research.....	471
School of Hygiene. ....	472
Connaught Laboratories....	472
Buildings and Hospitals. . .	473
General Information for Students .....	479
 Faculty of Applied Science and Engineering.. .....	483
Matriculation, Admission and Registration.....	485
Degrees. . . . .	487
Fees. . . . .	488
Scholarships and Prizes.....	489
Examinations and Term Work. . .	498
Regulations for Students in Attendance.....	502
The Graduating Departments. . . . .	507
Department of Civil Engineering. . . . .	508
Department of Mining Engineering. ....	513
Department of Mechanical Engineering.....	516
Department of Architecture....	519
Department of Chemical Engineering.....	522
Department of Electrical Engineering . . . . .	525
Department of Metallurgical Engineering .....	528
Outline of Courses of Instruction. ....	531
School of Engineering Research.....	576
Postgraduate and Professional Degrees. ....	577
Laboratory Equipment.....	581
 Faculty of Household Science. ....	595
 The Ontario College of Education.....	613
 Faculty of Forestry.....	657
 Faculty of Music. ....	673
 School of Graduate Studies.....	683
 Faculty of Dentistry.....	745
 Department of Social Service.....	821
 Department of Public Health Nursing.....	831

	PAGE
Curriculum in Law .....	849
Curricula, etc., Phm.B., B.S.A., B.V.Sc., Physical Training .. .	863
Pharmacy. ....	864
Agriculture .....	866
Veterinary Science ..	870
Physical Education ..	873
Wycliffe College. ....	878
Knox College .....	880
Victoria University.....	882
Ontario College of Pharmacy.....	883
Ontario Agricultural College.....	884
Ontario Veterinary College.....	887
Register of Students in Arts .....	App. 2
Register of Students in Department of University Extension ..	" 27
Register of Students in Medicine. ....	" 32
Register of Students in Applied Science and Engineering .. .	" 40
Register of Students in Household Science.....	" 45
Register of Students in Education ..	" 47
Register of Students in Forestry. ....	" 52
Register of Students in Music ..	" 53
Register of Students in School of Graduate Studies. ....	" 54
Register of Students in Dentistry.....	" 59
Register of Students in Social Service. ....	" 63
Register of Students in Public Health Nursing. ....	" 65
General Summary.....	" 68
Historical Sketch... ..	" 69
The Royal Ontario Museum.....	" 73
Portraits and Works of Art ..	" 80
Theses accepted for Degree of Ph.D. ....	" 84
Extension Lectures. ....	" 92
Catalogue of Special Events.....	" 110
Societies, University of Toronto..	" 112
University College. ....	" 123
Victoria College.....	" 126
Trinity College ..	" 130
St. Michael's College.....	" 134
Faculty of Medicine.....	" 135
Faculty of Applied Science and Engineering.....	" 137
College of Education.....	" 139
Faculty of Forestry.....	" 140
School of Graduate Studies.....	" 140
Index. ....	" 141



## ADMINISTRATIVE OFFICERS

1926-1927

### THE UNIVERSITY

<i>President</i> .....	SIR ROBERT ALEXANDER FALCONER, K.C.M.G., D.LITT., LL.D., D.D., D.C.L., OXON.
<i>Registrar</i> .....	JAMES BREBNER, B.A., LL.D.
<i>Bursar</i> .....	FERDINAND ALBERT MOURÉ, MUS.DOC.
<i>Librarian</i> .....	WILLIAM STEWART WALLACE, M.A.
<i>Supt. of Buildings and Grounds</i> .....	ARTHUR D'ORR LE PAN, B.A.SC.
<i>Director of Extension Work and Publicity</i> .....	WILLIAM J. DUNLOP, B.A., B.PAED.
<i>Warden of Hall House</i> .....	JOHN BURGON BICKERSTETH, M.A.
<i>Director of University Health Service</i> .....	GEORGE DANA PORTER, M.B.
<i>Medical Adviser for Women Students</i> .....	MISS EDITH GORDON, B.A. M.B., D.P.H.
<i>Manager of the University Press</i> .....	RICHARD J. HAMILTON, B.A.

### THE FACULTY OF ARTS

<i>President</i> .....	SIR ROBERT ALEXANDER FALCONER, K.C.M.G.
<i>Dean</i> .....	ALFRED TENNYSON DELURY, M.A., LL.D.
<i>Secretary</i> .....	JAMES BREBNER, B.A., LL.D.

### UNIVERSITY COLLEGE

<i>Principal</i> .....	MAURICE HUTTON, M.A., LL.D.
<i>Registrar</i> .....	GEORGE OSWALD SMITH, M.A.
<i>Dean in Residence</i> .....	CHARLES NORRIS COCHRANE, M.A.
<i>Dean of Women and Head of the Women's Union,</i> MRS. MOSSIE MAY KIRKWOOD, M.A., PH.D.	

### VICTORIA COLLEGE

<i>President</i> .....	REV. RICHARD PINCH BOWLES, M.A., D.D., LL.D.
<i>Dean and Secretary of the Faculty of Arts</i> .....	NORMAN WENTWORTH DEWITT, B.A., PH.D.
<i>Registrar</i> .....	CHARLES EARL AUGER, B.A.
<i>Bursar and Librarian</i> .....	REV. FRANK LOUIS BARBER, M.A., PH.D.
<i>Dean of Residence</i> .....	VINCENT MASSEY, M.A.
<i>Dean of Women Students</i> .....	MISS MARGARET ELEANOR THEODORA ADDISON, B.A.
<i>Acting Head of Women Students' Union</i> .....	MISS LUELLA MURIEL MANNING, B.A.

## TRINITY COLLEGE

<i>Provost</i> .....	REV. FRANCIS HERBERT COSGRAVE, M.A., B.D.
<i>Dean of the Faculty of Arts</i> .....	WILLIAM ALEXANDER KIRKWOOD, M.A., PH.D.
<i>Dean of Residence</i> .....	REV. GEORGE FREDERICK KINGSTON, M.A., B.D., PH.D.
<i>Registrar</i> .....	JOHN NEVILLE WOODCOCK, M.A.
<i>Librarian</i> .....	RUPERT EARLE LORING KITTREDGE, M.A.
<i>Bursar</i> .....	SYDNEY H. JONES, Esq.
<i>Principal of St. Hilda's College and Dean of Women Students,</i> <i>MISS MABEL CARTWRIGHT, B.A., LL.D.</i>	

## ST. MICHAEL'S COLLEGE

<i>Superior</i> .....	REV. EDMUND JOSEPH McCORKELL, M.A.
<i>Assistant Superior and Registrar</i> .....	REV. HENRY STANISLAUS BELLISLE, M.A.
<i>Councillor</i> .....	REV. JOSEPH THOMAS MUCKLE, M.A.
<i>Bursar</i> .....	REV. JOSEPH BASIL WALSH, M.A.

## FACULTY OF MEDICINE

<i>Dean</i> .....	ALEXANDER PRIMROSE, C.B., M.B., C.M., F.R.C.S.
<i>Associate Dean</i> .....	JOHN JAMES RICKARD MACLEOD, M.B., CH.B., D.P.H., D.Sc., LL.D., F.R.S.
<i>Secretary</i> .....	EDWARD STANLEY RYERSON, M.D., C.M.

## FACULTY OF APPLIED SCIENCE AND ENGINEERING

<i>Dean</i> .....	CHARLES HAMILTON MITCHELL, C.B., C.M.G., D.S.O., C.E., LL.D., D. Eng.
<i>Secretary</i> .....	WILLIAM STEWART WILSON, B.A.Sc.

## FACULTY OF HOUSEHOLD SCIENCE

<i>Dean</i> .....	
<i>Secretary</i> .....	MISS CLARA CYNTHIA BENSON, PH.D.

## ONTARIO COLLEGE OF EDUCATION

<i>Dean</i> .....	WILLIAM PAKENHAM, B.A., LL.D.
<i>Secretary</i> .....	MISS LYDA SWINARTON
<i>Librarian</i> .....	WALTER ERNEST MACPHERSON, B.A., LL.B.

## FACULTY OF FORESTRY

<i>Dean</i> .....	CLIFTON DURANT HOWE, M.S., PH.D.
<i>Secretary</i> .....	JAMES HERBERT WHITE, B.Sc.F., PH.D.

## FACULTY OF MUSIC

<i>Dean</i> .....	
<i>Secretary</i> .....	MISS ANNIE WILKIE PATTERSON, B.A.



## SCHOOL OF GRADUATE STUDIES

*Dean*.....JAMES PLAYFAIR McMURRICH, M.A., Ph.D., LL.D.  
*Secretary*.....MISS NORA MACKENZIE

## FACULTY OF DENTISTRY

*Dean*.....WALLACE SECCOMBE, D.D.S.  
*Secretary*.....COLIN C. ROUS, B.A.Sc.

## COMMITTEE ON UNIVERSITY EXTENSION

*Chairman*.....FRANCIS BARCLAY ALLAN, M.A., Ph.D.  
*Director*.....WILLIAM JAMES DUNLOP, B.A., B.PAED.  
*Secretary*.....MISS HARRIETT MULHOLLAND LATTER, B.A.

## DEPARTMENT OF SOCIAL SERVICE

*Director*.....JAMES ALFRED DALE, M.A.  
*Assistant Director*.....MISS A. C. MCGREGOR  
*Secretary-Librarian*.....MISS KATHERINE ANDERSON

## DEPARTMENT OF PUBLIC HEALTH NURSING

*Director*.....MISS EDITH KATHLEEN RUSSELL, B.A.  
*Assistant Director*.....MISS FLORENCE EMORY  
*Secretary*.....MISS NORMA MORTIMER, B.A.

NOTE.—Communications relating to standing in all Faculties and Departments and to curricula, instruction and examinations in Law, Pharmacy, Agriculture, Physical Education, and Veterinary Science are to be addressed to the Registrar of the University; correspondence regarding curricula, instruction and examinations in a particular Faculty is to be sent to the Secretary of that Faculty; correspondence regarding registration, curricula, instruction and examinations in Graduate Courses is to be sent to the Secretary of the School of Graduate Studies; enquiries with reference to College instruction and residence are to be addressed to the Registrar of the College concerned.

Applications for admission to the Faculties of Arts, Medicine, Applied Science and Engineering, Household Science, Forestry, and Dentistry, are to be sent to the Registrar of the University; applications for admission to the Faculties of Education and Music are to be sent to the Secretary of the Faculty concerned.

1927

## CALENDAR

1927

JANUARY		FEBRUARY		MARCH		APRIL	
Sun.	2 9 16 23 30	Sun.	6 13 20 27	Sun.	6 13 20 27	Sun.	3 10 17 24
Mon.	3 10 17 24 31	Mon.	7 14 21 28	Mon.	7 14 21 28	Mon.	4 11 18 25
Tues.	4 11 18 25 ..	Tues.	1 8 15 22 ..	Tues.	1 8 15 22 29	Tues.	5 12 19 26
Wed.	5 12 19 26 ..	Wed.	2 9 16 23 ..	Wed.	2 9 16 23 30	Wed.	6 13 20 27
Thur.	6 13 20 27 ..	Thur.	3 10 17 24 ..	Thur.	3 10 17 24 31	Thur.	7 14 21 28
Fri.	7 14 21 28 ..	Fri.	4 11 18 25 ..	Fri.	4 11 18 25 ..	Fri.	1 8 15 22 29
Sat.	1 8 15 22 29 ..	Sat.	5 12 19 26 ..	Sat.	5 12 19 26 ..	Sat.	2 9 16 23 30
MAY		JUNE		JULY		AUGUST	
Sun.	1 8 15 22 29	Sun.	5 12 19 26	Sun.	3 10 17 24 31	Sun.	7 14 21 28
Mon.	2 9 16 23 30	Mon.	6 13 20 27	Mon.	4 11 18 25 ..	Mon.	1 8 15 22 29
Tues.	3 10 17 24 31	Tues.	7 14 21 28	Tues.	5 12 19 26 ..	Tues.	2 9 16 23 30
Wed.	4 11 18 25 ..	Wed.	1 8 15 22 29	Wed.	6 13 20 27 ..	Wed.	3 10 17 24 31
Thur.	5 12 19 26 ..	Thur.	2 9 16 23 30	Thur.	7 14 21 28 ..	Thur.	4 11 18 25 ..
Fri.	6 13 20 27 ..	Fri.	3 10 17 24 ..	Fri.	1 8 15 22 29 ..	Fri.	5 12 19 26 ..
Sat.	7 14 21 28 ..	Sat.	4 11 18 25 ..	Sat.	2 9 16 23 30 ..	Sat.	6 13 20 27 ..
SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
Sun.	4 11 18 25	Sun.	2 9 16 23 30	Sun.	6 13 20 27	Sun.	4 11 18 25
Mon.	5 12 19 26	Mon.	3 10 17 24 31	Mon.	7 14 21 28	Mon.	5 12 19 26
Tues.	6 13 20 27	Tues.	4 11 18 25 ..	Tues.	1 8 15 22 29	Tues.	6 13 20 27
Wed.	7 14 21 28	Wed.	5 12 19 26 ..	Wed.	2 9 16 23 30	Wed.	7 14 21 28
Thur.	1 8 15 22 29	Thur.	6 13 20 27 ..	Thur.	3 10 17 24 ..	Thur.	1 8 15 22 29
Fri.	2 9 16 23 30	Fri.	7 14 21 28 ..	Fri.	4 11 18 25 ..	Fri.	2 9 16 23 30
Sat.	3 10 17 24 ..	Sat.	1 8 15 22 29 ..	Sat.	5 12 19 26 ..	Sat.	3 10 17 24 31

1928

## CALENDAR

1928

JANUARY		FEBRUARY		MARCH		APRIL	
Sun.	1 8 15 22 29	Sun.	5 12 19 26	Sun.	4 11 18 25	Sun.	1 8 15 22 29
Mon.	2 9 16 23 30	Mon.	6 13 20 27	Mon.	5 12 19 26	Mon.	2 9 16 23 30
Tues.	3 10 17 24 31	Tues.	7 14 21 28	Tues.	6 13 20 27	Tues.	3 10 17 24 ..
Wed.	4 11 18 25 ..	Wed.	1 8 15 22 29	Wed.	7 14 21 28	Wed.	4 11 18 25 ..
Thur.	5 12 19 26 ..	Thur.	2 9 16 23 ..	Thur.	1 8 15 22 29	Thur.	5 12 19 26 ..
Fri.	6 13 20 27 ..	Fri.	3 10 17 24 ..	Fri.	2 9 16 23 30	Fri.	6 13 20 27 ..
Sat.	7 14 21 28 ..	Sat.	4 11 18 25 ..	Sat.	3 10 17 24 31	Sat.	7 14 21 28 ..
MAY		JUNE		JULY		AUGUST	
Sun.	6 13 20 27	Sun.	3 10 17 24 ..	Sun.	1 8 15 22 29	Sun.	5 12 19 26
Mon.	7 14 21 28	Mon.	4 11 18 25 ..	Mon.	2 9 16 23 30	Mon.	6 13 20 27
Tues.	1 8 15 22 29	Tues.	5 12 19 26 ..	Tues.	3 10 17 24 31	Tues.	7 14 21 28
Wed.	2 9 16 23 30	Wed.	6 13 20 27 ..	Wed.	4 11 18 25 ..	Wed.	1 8 15 22 29
Thur.	3 10 17 24 31	Thur.	7 14 21 28 ..	Thur.	5 12 19 26 ..	Thur.	2 9 16 23 30
Fri.	4 11 18 25 ..	Fri.	1 8 15 22 29 ..	Fri.	6 13 20 27 ..	Fri.	3 10 17 24 31
Sat.	5 12 19 26 ..	Sat.	2 9 16 23 30 ..	Sat.	7 14 21 28 ..	Sat.	4 11 18 25 ..
SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
Sun.	2 9 16 23 30	Sun.	7 14 21 28	Sun.	4 11 18 25	Sun.	2 9 16 23 30
Mon.	3 10 17 24 ..	Mon.	1 8 15 22 29	Mon.	5 12 19 26	Mon.	3 10 17 24 31
Tues.	4 11 18 25 ..	Tues.	2 9 16 23 30	Tues.	6 13 20 27	Tues.	4 11 18 25 ..
Wed.	5 12 19 26 ..	Wed.	3 10 17 24 31	Wed.	7 14 21 28	Wed.	5 12 19 26 ..
Thur.	6 13 20 27 ..	Thur.	4 11 18 25 ..	Thur.	1 8 15 22 29	Thur.	6 13 20 27 ..
Fri.	7 14 21 28 ..	Fri.	5 12 19 26 ..	Fri.	2 9 16 23 30	Fri.	7 14 21 28 ..
Sat.	1 8 15 22 29 ..	Sat.	6 13 20 27 ..	Sat.	3 10 17 24 ..	Sat.	1 8 15 22 29 ..

# CALENDAR 1927-1928

1927—July	1 Friday . . .	Dominion Day. University Buildings closed.
July	4 Monday. . .	Summer Session begins.
July	4 Monday.	Summer Session in the Ontario College of Education commences.
Aug.	2 Tuesday . .	Last day for receiving applications for the September Examinations in the Faculty of Arts
Aug.	6 Saturday . .	Summer Session in the Ontario College of Education closes.
Aug.	8 Monday	Last day for receiving applications for the Supplemental Examinations in the Faculty of Dentistry.
Aug. 13	Saturday .	Students of the Third Year, Dept. 1, Faculty of Applied Science and Engineering, report at Summer Survey Camp.
Aug. 15	Monday...	Last day for receiving applications for the Supplemental Examinations in the Faculty of Medicine.
Aug. 20	Saturday .	Students of the Third Year, Dept. 2, Faculty of Applied Science and Engineering, report at Summer Survey Camp.
Aug. 22	Monday.	Last day for receiving applications for admission to Dental Nurses' Course.
Aug. 29	Monday	Last day for receiving applications for admission to the Faculty of Dentistry for Session 1927-1928.
Aug. 29	Monday .	Dental Infirmary reopens.
Sept. 1	Thursday. .	Last day for receiving applications for admission to the Faculty of Medicine for Session 1927-1928.
Sept 1	Thursday. .	Last day for receiving applications for Supplemental Examinations in the Faculty of Applied Science and Engineering.
Sept. 1	Thursday	Supplemental Examinations in the Faculty of Arts commence.
Sept. 1	Thursday	Beginning of preliminary month of practical work in the Department of Public Health Nursing.
Sept. 5	Monday.....	Labour Day. University Buildings closed.
Sept. 6	Tuesday.....	Supplemental Examinations in the Faculties of Medicine and Dentistry commence.
Sept. 8	Thursday..	Students of the Fourth Year, Astronomy Option, Faculty of Applied Science and Engineering, report at Summer Survey Camp.

- Sept. 12-17 Monday-Saturday—Dental Practitioners' Course.
- Sept. 15 Thursday... Meeting of the Finance and Executive Committee of Trinity College.
- Sept. 16 Friday.... Meeting of the Council of the Faculty of Medicine.
- Sept. 19 Monday.... Dental Nurses' Course commences.
- Sept. 19 Monday.... Meeting of the Council of the Faculty of Dentistry.
- Sept. 21 Wednesday... Supplemental Examinations in the Faculty of Applied Science and Engineering commence.
- Sept. 24 Saturday... Enrolment in classes by the various Professors in the Faculty of Arts begins at 9 a.m.
- Sept. 26 Monday.... Enrolment in the Department of Social Service.
- Sept. 26 Monday.... Registration in person of the First Year in the Faculty of Applied Science and Engineering from 9 a.m. to 5 p.m.
- Sept. 26 Monday.... Meeting of the Council of the Faculty of Applied Science and Engineering.
- Sept. 26 Monday.... Meeting of the Council of the Faculty of Arts.
- Sept. 27 Tuesday.... Academic Year begins at 9 a.m.
- Sept. 27 Tuesday.... Last day for the completion of registration in person and enrolment in classes for the Session 1927-1928 in the Faculties of Arts and Forestry to be completed by 5 p.m.
- Sept. 27 Tuesday.... Registration in the Faculty of Medicine by the Secretary of the Faculty. Enrolment in classes by the various Professors.
- Sept. 27 Tuesday.... Registration in person with the Secretary of the Faculty of Dentistry before 5 p.m.  
The opening address by the Dean to the members of the first year at 4.30 p.m. in Lecture Room A.
- Sept. 27 Tuesday.... Fourth Year students in the Faculty of Forestry report at Forestry School Camp.
- Sept. 27 Tuesday.... Preliminary instruction to the First Year and registration in person of the Second, Third and Fourth Years in the Faculty of Applied Science and Engineering.  
The Dean's address to the First Year at 9.30 a.m. in the First Year draughting room.
- Sept. 28 Wednesday... Lectures begin at 9 a.m.
- Sept. 28 Wednesday... The opening address by the President to the students of all the Faculties at 3 p.m., in Convocation Hall.

Sept. 28 Wednesday...Lectures and laboratory work commence at 8 a.m. in the Faculty of Applied Science and Engineering. Last day for handing in Vacation Work.

Sept. 29 Thursday....St. Michael's Day.

Oct. 1 Saturday....Stated meeting of the Caput to deal with requests as to social functions until November 15.

Oct. 3 Monday...Medical Track Meet. Neither lectures nor laboratory classes in the Faculty of Medicine given after 1 p.m.

Oct. 5 Wednesday...Meeting of Council of Faculty of Applied Science and Engineering.

Oct. 5 Wednesday...Meeting of the Faculty of Arts of Victoria College.

Oct. 6 Thursday... Meeting of the Council of the Ontario College of Education.

Oct. 6-9 Thursday-Sunday—Celebration of the Centenary of the granting of the Charter of King's College, Toronto.

Oct. 7 Friday..... Meeting of the Senate of Victoria College.

Oct. 7 Friday..... Meeting of the Council of the Faculty of Medicine.

Oct. 7 Friday.....Meeting of University College Council.

Oct. 7 Friday.....Interfaculty Track Meet. Neither lectures nor laboratory classes given after 1 p.m.

Oct. 10 Monday...Meeting of the Council of the Faculty of Arts.

Oct. 12 Wednesday. Charter Day, Victoria College.

Oct. 14 Friday..... Meeting of Senate.

Oct. 20 Thursday...Meeting of the Finance and Executive Committee of Trinity College.

Oct. 21 Friday.....Meeting of the Council of the Faculty of Applied Science and Engineering.

Nov. 2 Wednesday...Meeting of the Faculty of Arts of Victoria College.

Nov. 3 Thursday...Meeting of the Council of the Ontario College of Education.

Nov. 4 Friday... Meeting of University College Council.

Nov. 4 Friday... Meeting of the Senate of Victoria College.

Nov. 4 Friday.....Meeting of the Council of the Faculty of Applied Science and Engineering.

Nov. 7 Monday....Meeting of the Council of the Faculty of Arts.

Nov. 10 Thursday...Meeting of the Finance and Executive Committee of Trinity College.

- Nov. 11 Friday . . . . Armistice Day. Memorial Service at the Soldiers' Tower at 11 a.m. Neither lectures nor laboratory classes given from 10 a.m. to 12 noon.
- Nov. 11 Friday . . . Meeting of Senate.
- Nov. 12-14 Saturday-Monday—Thanksgiving. Neither lectures nor laboratory classes given.
- Nov. 16 Wednesday. Annual General Business Meeting of the Convocation of Trinity College.
- Nov. 17 Thursday . . . Annual General Meeting of the Corporation of Trinity College.
- Nov. 30 Wednesday Last day for receiving applications for Supplemental Examinations in the Faculty of Forestry.
- Nov. 30 Wednesday. . . Meeting of the Faculty of Arts of Victoria College.
- Dec. 1 Thursday. . . Last day for receiving applications for Supplemental Examinations in the Faculty of Applied Science and Engineering.
- Dec. 1 Thursday. . . Meeting of the Council of the Ontario College of Education.
- Dec. 2 Friday. . . . . Meeting of the Council of the Faculty of Applied Science and Engineering.
- Dec. 2 Friday. . . . . Meeting of University College Council.
- Dec. 2 Friday . . . . . Meeting of the Senate of Victoria College.
- Dec. 2 Friday . . . Meeting of the Council of the Faculty of Medicine.
- Dec. 5 Monday. . . . . Meeting of the Council of the Faculty of Arts.
- Dec. 5 Monday. . . . . Meeting of the Council of the Faculty of Dentistry.
- Dec. 9 Friday . . . . . Meeting of Senate.
- Dec. 15 Thursday. . . Meeting of the Finance and Executive Committee of Trinity College.
- Dec. 15-21 Thursday-Wednesday—Term Examinations.
- Dec. 21 Wednesday. . . Last day of Lectures. Term ends at 1 p.m.
- Dec. 26 Monday. . . . . University Buildings closed.
- 1928—Jan. 2 Monday. . . . . University Buildings closed.
- Jan. 4 Wednesday. . . Mid-session Examinations and lectures commence in the Faculty of Applied Science and Engineering.
- Jan. 4 Wednesday. . . Easter Term begins. Lectures commence at 9 a.m.
- Jan. 4 Wednesday. . . Meeting of the Faculty of Arts of Victoria College.
- Jan. 5 Thursday. . . Meeting of the Council of the Ontario College of Education.

- Jan. 6 Friday.....Meeting of University College Council.  
Jan. 6 Friday. ....Meeting of the Council of the Faculty of Applied Science and Engineering.  
Jan. 6 Friday.....Meeting of the Senate of Victoria College.  
Jan. 9 Monday....Meeting of the Council of the Faculty of Arts.  
Jan. 9 Monday....Supplemental Examinations in the Faculty of Forestry commence.  
Jan. 13 Friday..... Meeting of Senate.  
Jan. 15 Sunday.....Founder's Day, Trinity College.  
Jan. 19 Thursday...Meeting of the Finance and Executive Committee of Trinity College.  
Jan. 20 Friday.....Meeting of the Council of the Faculty of Applied Science and Engineering.  
Feb. 1 Wednesday..Meeting of the Faculty of Arts of Victoria College.  
Feb. 2 Thursday....Meeting of the Council of the Ontario College of Education.  
Feb. 3 Friday..... Meeting of University College Council.  
Feb. 3 Friday.....Meeting of the Senate of Victoria College.  
Feb. 3 Friday.....Meeting of the Council of the Faculty of Medicine.  
Feb. 3 Friday. ....Meeting of the Council of the Faculty of Applied Science and Engineering.  
Feb. 6 Monday....Meeting of the Council of the Faculty of Arts.  
Feb. 10 Friday..... Meeting of Senate.  
Feb. 16 Thursday...Meeting of the Finance and Executive Committee of Trinity College.  
Feb. 22 Wednesday..Ash Wednesday.  
Feb. 29 Wednesday..Meeting of the Faculty of Arts of Victoria College.  
Mar. 1 Thursday....Last day for receiving applications for Annual Examinations in Arts and Law and Medicine.  
Mar. 1 Thursday....Last day for receiving applications for Supplemental Examinations in Faculty of Applied Science and Engineering.  
Mar. 2 Friday..... Meeting of University College Council.  
Mar. 2 Friday.....Meeting of Senate of Victoria College.  
Mar. 2 Friday.....Meeting of the Council of the Faculty of Applied Science and Engineering.  
Mar. 5 Monday....Meeting of the Council of the Faculty of Arts.  
Mar. 8 Thursday....Meeting of the Council of the Ontario College of Education.  
Mar. 9 Friday..... Meeting of Senate.

- Mar. 15 Thursday....Meeting of the Finance and Executive Committee of Trinity College.
- Mar. 15 Thursday....Last day for receiving applications for Annual Examinations in the Faculty of Household Science.
- Mar. 31 Saturday. ...Last day for submitting LL.B. theses.
- Apr. 2 Monday ...Meeting of the Council of the Faculty of Dentistry.
- Apr. 2-14 Monday-Saturday—Examinations in Department of Public Health Nursing.
- Apr. 4 Wednesday...Meeting of the Faculty of Arts of Victoria College.
- Apr. 4 Wednesday...Easter term ends in the Faculty of Applied Science and Engineering. Lectures and laboratory work end at 5 p.m.
- Apr. 5 Thursday....Meeting of the Council of the Faculty of Medicine.
- Apr. 5 Thursday... Meeting of the Council of the Faculty of Applied Science and Engineering.
- Apr. 6 Friday. ...Meeting of the Senate of Victoria College.
- Apr. 6 Friday... Meeting of University College Council.
- Apr. 6-9 Friday-Monday—Easter. Neither lectures nor laboratory classes given.
- Apr. 6-16 Friday-Monday—Easter Vacation in the Ontario College of Education.
- Apr. 10 Tuesday....Meeting of the Council of the Faculty of Arts.
- Apr. 10 Tuesday....Annual Examinations commence in the Faculty of Applied Science and Engineering.
- Apr. 13 Friday .... Meeting of Senate.
- Apr. 14 Saturday....Lectures in the Faculty of Forestry end.
- Apr. 16 Monday...Examinations in the Faculty of Forestry commence.
- Apr. 16 Monday....Fourth Year Annual Examinations in Dentistry commence.
- Apr. 16-June 15.....Period of continuous practical work in the Department of Public Health Nursing.
- Apr. 19 Thursday...Meeting of the Finance and Executive Committee of Trinity College.
- Apr. 24-30 Tuesday-Monday—Term Examinations in the Faculty of Arts.
- May 1 Tuesday....Annual Examinations in Arts, Household Science, Law, Pharmacy, and Agriculture commence.
- May 1 Tuesday....Last day for receiving applications from candidates for Matriculation Scholarships.



May 2 Wednesday. Meeting of the Faculty of Arts of Victoria College.

May 2 Wednesday..Meeting of the Council of the Faculty of Applied Science and Engineering.

May 4 Friday.....Meeting of University College Council.

May 4 Friday. ....Meeting of the Senate of Victoria College.

May 4 Friday. ....Meeting of the Council of the Faculty of Applied Science and Engineering.

May 7 Monday . . Meeting of the Council of the Faculty of Arts.

May 7 Monday...Annual Examinations in the Faculty of Medicine commence.

May 11 Friday . . Meeting of Senate.

May 12 Saturday ..Second Term, Faculty of Forestry ends.

May 14 Monday... Annual examinations in the First, Second, Third and Fifth Years in the Faculty of Dentistry commence. Dental Nurses' Examinations commence.

May 17 Thursday... Meeting of the Finance and Executive Committee of Trinity College.

May 19 Saturday....Session closes in the Faculty of Dentistry.

May 23 Wednesday..Academic Year in Arts ends.

May 24 Thursday ...University Buildings closed.

May 26 Saturday. ...Medical Session ends.

May 28 Monday... Meeting of the Council of the Faculty of Dentistry.

May 30 Wednesday..Meeting of the Faculty of Arts of Victoria College.

June 1 Friday..... Last day for receiving applications for Fellowships.

June 1 Friday.....Meeting of University College Council.

June 4 Monday .. Meeting of the Council of the Faculty of Arts.

June 6 Wednesday..Meeting of Senate.

June 7-8 Thursday-Friday—University Commencement.

June 15 Friday.....Session closes at the Ontario College of Education.

June 21 Thursday ...Meeting of the Finance and Executive Committee of Trinity College.



# UNIVERSITY OF TORONTO

1926-1927

---

## THE BOARD OF GOVERNORS

THE HON. AND REV. HENRY JOHN CODY, M.A., D.D., LL.D., *Chairman.*  
THE REV. DONALD BRUCE MACDONALD, M.A., LL.D., *Vice-Chairman.*

---

### EX-OFFICIO

THE RT. HON. SIR WILLIAM MULOCK P.C., K.C.M.G., M.A., LL.D.,  
*Chancellor.*  
SIR ROBERT ALEXANDER FALCONER, K.C.M.G., D.LITT., LL.D., D.D.,  
D.C.L., *President.*

### RETIRING IN 1926

WILLIAM CHARLES GOOD, ESQ., B.A., M.P.  
DANIEL MILLER, ESQ.  
ALBERT EDWARD GOODERHAM, ESQ., LL.D.  
SIR JOHN WILLISON, LL.D. (*Ob.*)  
JOHN ALEXANDER WALLACE, ESQ., M.A.  
FRANCIS WALTER MERCHANT, ESQ., M.A., D.PAED., LL.D.

### RETIRING IN 1928

THE HON. VINCENT MASSEY, M.A.  
THE REV. DONALD BRUCE MACDONALD, M.A., LL.D.  
THOMAS ALEXANDER RUSSELL, ESQ., B.A.  
THE HON. AND REV. HENRY JOHN CODY, M.A., D.D., LL.D.  
F. GORDON OSLER, ESQ.  
HARRY BERTRAM ANDERSON, ESQ., M.D., C.M.

### RETIRING IN 1930

SIR JOSEPH WESLEY FLAVELLE, BART., LL.D.  
THE HON. HUGH THOMAS KELLY, LL.D.  
REUBEN WELLS LEONARD, ESQ.  
ROBERT ALLAN PYNE, ESQ., M.D., LL.D.  
ANGUS MACMURCHY, ESQ., K.C., B.A.  
THE RT. HON. LYMAN POORE DUFF, P.C., B.A., LL.D.

### RETIRING IN 1931

WILLIAM KERR GEORGE, ESQ.  
THE HON. NEWTON WESLEY ROWELL, K.C., LL.D.  
ERIC NORMAN ARMOUR, ESQ., K.C., B.A.  
JOHN JAMES GIBSON, ESQ., B.A.

---

FERDINAND ALBERT MOURÉ, Mus.Doc., BURSAR, *Secretary.*

## THE SENATE

### EX-OFFICIO MEMBERS

THE RT. HON. SIR WILLIAM MULOCK, P.C., K.C.M.G., M.A., LL.D.,  
*Chancellor.*

THE HON. AND REV. HENRY JOHN CODY, M.A., D.D., LL.D.,  
*Chairman of the Board of Governors.*

SIR ROBERT ALEXANDER FALCONER, K.C.M.G.,  
*President of the University.*

MAURICE HUTTON, M.A., LL.D.,  
*Principal of University College.*

REV. RICHARD PINCH BOWLES, M.A., D.D., LL.D.,  
*President of Victoria College.*

REV. FRANCIS HERBERT COSGRAVE, M.A., B.D.,  
*Provost of Trinity College.*

REV. EDMUND JOSEPH McCORKELL, M.A.  
*Superior of St. Michael's College.*

REV. ALFRED GANDIER, M.A., D.D., LL.D.,  
*Principal of Knox College.*

REV. THOMAS ROBERT O'MEARA, D.D., LL.D.,  
*Principal of Wycliffe College.*

ALFRED TENNYSON DeLURY, M.A., LL.D.,  
*Dean of the Faculty of Arts.*

ALEXANDER PRIMROSE, C.B., M.B., C.M., F.R.C.S., ENG., LL.D.,  
*Dean of the Faculty of Medicine.*

CHARLES HAMILTON MITCHELL, C.B., C.M.G., D.S.O., C.E.,  
[LL.D., D. ENG.]  
*Dean of the Faculty of Applied Science and Engineering.*

WILLIAM PAKENHAM, B.A., LL.D.,  
*Dean of the Ontario College of Education.*

CLIFTON DURANT HOWE, M.S., PH.D.,  
*Dean of the Faculty of Forestry.*

JAMES PLAYFAIR McMURRICH, M.A., PH.D., LL.D.,  
*Dean of the School of Graduate Studies.*

WALLACE SECCOMBE, D.D.S.,  
*Dean of the Faculty of Dentistry.*

## REPRESENTATIVES OF THE FACULTIES

### *Faculty of Arts of the University:*

FRANCIS BARCLAY ALLAN, M.A., Ph.D.,  
SAMUEL BEATTY, M.A., Ph.D.,  
BENJAMIN ARTHUR BENSLEY, B.A., Ph.D.,  
EDWARD ALEXANDER BOTT, B.A.,  
GEORGE SIDNEY BRETT, M.A.,  
MILTON ALEXANDER BUCHANAN, B.A., Ph.D.,  
ELI FRANKLIN BURTON, B.A., Ph.D.,  
CLARENCE AUGUSTUS CHANT, M.A., Ph.D.,  
LESLIE CHARLES COLEMAN, B.A., Ph.D.,  
CHARLES TRICK CURRELLY, M.A.,  
JAMES ALFRED DALE, M.A.,  
JOSEPH HORACE FAULL, B.A., Ph.D.,  
CHARLES RYLE FAY, M.A., D.Sc.,  
JOHN CHARLES FIELDS, B.A., Ph.D., F.R.S.,  
WILLIAM JACKMAN, M.A.,  
WILLIAM PAUL McCLURE KENNEDY, M.A., Litt.D.,  
FRANK BOTELER KENRICK, M.A., Ph.D.,  
WILLIAM JAMES LOUDON, B.A.,  
ROBERT MORRISON MACIVER, M.A., D.Phil.,  
MICHAEL ALEXANDER MACKENZIE, M.A.,  
JOHN CUNNINGHAM McLENNAN, O.B.E., Ph.D., D.Sc., LL.D.,  
JOHN JAMES RICKARD MACLEOD, M.B., Ch.B., D.P.H., D.Sc.,  
[F.R.S.,  
[F.R.S.,  
WILLIAM LASH MILLER, B.A., Ph.D.,  
ELWOOD S. MOORE, M.A., Ph.D.,  
WILLIAM ARTHUR PARKS, B.A., Ph.D.,  
WILLIAM HUNTER PIERSOL, B.A., M.B.,  
JOHN SATTERLY, M.A., D.Sc.,  
JAMES EUSTACE SHAW, A.B., Ph.D.,  
ROBERT BOYD THOMSON, B.A.,  
EDMUND MURTON WALKER, B.A., M.B.,  
THOMAS LEONARD WALKER, M.A., Ph.D.,  
GEORGE MacKINNON WRONG, M.A., LL.D.

### *Faculty of Medicine:*

JOHN GERALD FITZGERALD, M.D., LL.D.,  
JOHN TAYLOR FOTHERINGHAM, C.M.G., B.A., M.B., M.D.,  
[C.M., LL.D.,  
DUNCAN ARCHIBALD LAMONT GRAHAM, M.B.,  
VELYIEN EWART HENDERSON, M.A., M.B.,  
CLARENCE LESLIE STARR, M.D., LL.D.

### *Faculty of Applied Science and Engineering:*

JAMES WATSON BAIN, B.A.Sc.,  
PETER GILLESPIE, B.A.Sc., C.E., M.Sc.,  
THOMAS REEVE ROSEBRUGH, M.A.,  
LOUIS BEAUFORT STEWART,  
CHARLES HENRY CHALLONER WRIGHT, B.A.Sc.

### *Faculty of Household Science:*

CLARA CYNTHIA BENSON, B.A., Ph.D.,  
ANNIE LEWISA LAIRD, M.S.

### *Ontario College of Education:*

GEORGE AUGUSTUS CORNISH, B.A.,  
PETER SANDIFORD, M.Sc., Ph.D.

*Faculty of Dentistry:*

CHARLES ANGUS KENNEDY, D.D.S.,  
ARNOLD DENBOW ALFRED MASON, D.D.S.,  
EDGAR WATSON PAUL, D.D.S.,  
ALBERT EDWARD WEBSTER, M.A., M.D., D.D.S.

*Faculty of University College:*

ALEXANDER GRANT BROWN, M.A.,  
BARKER FAIRLEY, M.A., Ph.D.,  
WILLIAM ROBERT TAYLOR, M.A., Ph.D.

*Faculty of Arts of Victoria College:*

NORMAN WENTWORTH DEWITT, B.A., Ph.D.,  
WILLIAM ARTHUR POTTER, M.A., B.D.,  
CHARLES BRUCE SISSONS, B.A., LL.D.

*Faculty of Arts of Trinity College:*

LLOYD CLIFFORD ARNOTT HODGINS, M.A.,  
WILLIAM ALEXANDER KIRKWOOD, M.A., Ph.D.,  
JOHN NEVILLE WOODCOCK, M.A.

*Faculty of Arts of St. Michael's College:*

REV. HENRY STANISLAUS BELLISLE, M.A.,  
REV. HENRY CARR, B.A., LL.D.,  
SIR BERTRAM COGHILL ALAN WINDLE, M.A., M.D., Sc.D.,  
[Ph.D., LL.D., F.R.S.]

APPOINTED MEMBERS

CHARLES EARL AUGER, B.A.,  
*Representative of Victoria University.*

THE RIGHT REV. JAMES FIELDING SWEENEY, M.A., D.D.,  
[D.C.L., LL.D.,]  
*Representative of the University of Trinity College.*

JOHN FRANCIS POWER, M.A.,  
*Representative of St. Michael's College.*

REV. RICHARD DAVIDSON, M.A., Ph.D.,  
REV. GEORGE CAMPBELL PIDGEON, B.A., D.D.,  
*Representatives of Knox College.*

NEWMAN WRIGHT HOYLES, K.C., B.A., LL.D.,  
JOHN DELATRE FALCONBRIDGE, K.C., M.A., LL.B.,  
*Representatives of Wycliffe College.*

REV. CHARLES WALLACE BISHOP, M.A.,  
*Representative of Albert College, Belleville.*

JOSEPH BENSON REYNOLDS, M.A.,  
*Representative of the Ontario Agricultural College, Guelph.*

CHARLES FREDERICK HEEBNER, Ph.M.B.,  
*Representative of the Ontario College of Pharmacy.*

CHARLES DUNCAN MCGILVRAY, D.V.Sc.,  
*Representative of the Ontario Veterinary College, Guelph.*

MICHAEL HERMAN LUDWIG, K.C.,  
*Representative of the Law Society of Upper Canada.*

ROBERT GORDON McLEAN, D.D.S.,  
*Representative of the Royal College of Dental Surgeons of Ontario.*

GEORGE ROBERT CRUICKSHANK, B.A., M.D.,  
*Representative of the Ontario Medical Council.*

#### ELECTED MEMBERS

ALFRED BAKER, M.A., LL.D.,  
EDWARD ROBERT CAMERON, M.A., LL.D.,  
JOHN SAMUEL CAMPBELL, M.A.,  
JAMES HENRY COYNE, M.A., LL.D.,  
DUNCAN BROWN GILLIES, B.A.,  
EDWIN AUSTIN HARDY, B.A., D.PAED.,  
WILLIAM HOUSTON, M.A.,  
GERTRUDE LAWLER, M.A.,  
EVELYN McDONALD, B.A.,  
GEORGE GALLIE NASMITH, C.M.G., PH.D., D.Sc., LL.D.,  
WILLIAM NISBET PONTON, K.C., M.A.,  
SIMON JAMES McLEAN, A.M., LL.B., PH.D.,  
*Representatives of the Graduates in Arts of University College.*

CLIFFORD DOUGLAS HENDERSON, B.A.,  
GEORGE HERBERT LOCKE, M.A.,  
THE HON. CORNELIUS ARTHUR MASTEN, B.A., LL.D.,  
MARY HURD SKINNER, B.A.,  
JAMES RUSSELL LOVETT STARR, B.A., LL.B.,  
*Representatives of the Graduates in Arts of Victoria College.*

SARAH CHARLOTTE NATION, M.A.,  
JOHN AUSTIN WORRELL, K.C., M.A. (Ob.),  
GERARD BRAKENRIDGE STRATHY, M.A.,  
HENRY BROCK, D.C.L.,  
JOHN GEORGE ALTHOUSE, M.A.,  
*Representatives of the Graduates in Arts of Trinity College.*

IRVING HEWARD CAMERON, M.B., LL.D., F.R.C.S.,  
WILLIAM JAMES McCOLLUM, M.B.,  
CHARLES JOHN OLIVER HASTINGS, M.D., LL.D.,  
CHARLES DANIEL PARFITT, M.D.,  
*Representatives of the Graduates in Medicine.*

ROBERT JOHN MARSHALL, B.A.Sc.,  
JOHN JAMES TRAILL, B.A.Sc., C.E.,  
*Representatives of the Graduates in Applied Science and Engineering.*

CHARLES MORSE, D.C.L.,  
THE HON. WILLIAM EDGAR RANEY, B.C.L.,  
*Representatives of the Graduates in Law.*

GEORGE CHRISTIE CREELMAN, B.S.A., LL.D.,  
JOHN ARTHUR CARROLL, B.S.A.,

*Representatives of the Graduates in Agriculture.*

ROBERT ALEXANDER GRAY, B.A.,  
HENRY ROWE HOCKING KENNER, B.A.,  
JOHN JEFFRIES, B.A.,  
WILLIAM CHARLES MICHELL, M.C., B.A.,

*Representatives of the Principals of Collegiate Institutes or High  
Schools or Assistants therein.*



# OFFICERS OF INSTRUCTION

1926-1927

In the following lists the faculty or department to which each member of the staff belongs is indicated as follows:—Arts, A; Medicine, M; Applied Science and Engineering, S; Household Science, H; Education, E; Forestry, F; Music, Ms; Graduate Studies, G; Dentistry, D; Social Service, SS; Public Health Nursing, P; Special Research, R.

The members of the staff in the Faculty of Arts are indicated as follows: (U) University of Toronto; (C) University College; (V) Victoria College; (T) Trinity College; (M) St. Michael's College.

## PROFESSORES EMERITI

- A WILLIAM JOHN ALEXANDER, B.A. LOND., PH.D., JOHNS HOPKINS,  
LL.D., QUEEN'S,  
155 Spadina Road.
- A ALFRED BAKER, M.A., LL.D.,  
81 Madison Avenue.
- A ANDREW JAMES BELL, M.A., PH.D., BRESLAU,  
17 Avenue Road.
- M GEORGE HERBERT BURNHAM, M.D.,  
1 St. Thomas Street.
- M IRVING HEWARD CAMERON, M.B., LL.D., EDIN., F.R.C.S., ENG.,  
307 Sherbourne Street.
- A ADAM CARRUTHERS, M.A.,  
603 Huron Street.
- A ARTHUR PHILEMON COLEMAN, M.A., PH.D., BRESLAU, LL.D.,  
QUEEN'S, WESTERN, D.Sc., F.R.S.,  
476 Huron Street.
- A REV. DANIEL CUSHING, LL.D.,  
St. Basil's Novitiate, St. Clair Avenue West.
- M FREDERICK LEMAITRE GRASETT, M.B., C.M.,  
7 Forest Hill Road.
- A DAVID REID KEYS, M.A.,  
87 Avenue Road.
- A JAMES FREDERICK MCCURDY, PH.D., PRINCETON, LL.D., NEW  
BRUNSWICK,  
106 South Drive.
- A JOHN MACNAUGHTON, M.A., LL.D., QUEEN'S,  
London, England.

- M ALEXANDER MCPHEDRAN, M.B., M.D., C.M., LL.D.,  
151 Bloor Street West.
- M HENRY THOMAS MACHELL, M.D.,  
459 Avenue Road.
- M NEWTON ALBERT POWELL, M.D., C.M., M.D., BELLEVUE, N.Y.,  
167 College Street.
- A JOHN SQUAIR, B.A.,  
368 Palmerston Boulevard.
- M JAMES ALGERNON TEMPLE, M.D., C.M., LL.D.,  
186 Warren Road.
- A WILLIAM HENRY VANDERSMISSEN, M.A., PH.D.,  
15 Surrey Place.
- M DAVID JAMES GIBB WISHART, B.A., M.D., C.M., TOR., MCGILL,  
47 Grosvenor Street.
- M ADAM HENRY WRIGHT, B.A., M.D.,  
80 Roxborough Street East.
- A ROBERT RAMSAY WRIGHT, M.A., B.Sc., LL.D.,  
9 Moreton Road, Oxford, England.

## PROFESSORS

- A FRANCIS BARCLAY ALLAN, M.A., PH.D.,  
*Professor of Organic Chemistry, (U.)*  
380 Brunswick Avenue.
- S GEORGE R. ANDERSON, M.A., A.M., HARVARD,  
*Professor of Engineering Physics and Photography,*  
7 Rose Park Crescent.
- S ROBERT WILLIAM ANGUS, B.A.Sc.,  
*Professor of Mechanical Engineering,*  
42 Howland Avenue.
- D IRVIN HENRY ANTE, D.D.S.,  
*Professor of Crown and Bridge Prosthesis,*  
326 Bloor Street West.
- A CHARLES EARL AUGER, B.A.,  
*Professor of English (V.)*  
70 Farnham Avenue.
- S JAMES WATSON BAIN, B.A.Sc., F.R.S.C.,  
*Professor of Chemical Engineering,*  
393 Brunswick Avenue.
- M FREDERICK GRANT BANTING, M.C., M.D., LL.D., QUEEN'S, WESTERN,  
D.Sc.,  
*Professor of Medical Research,*  
46 Bedford Road.

- A SAMUEL BEATTY, M.A., PH.D.,  
*Professor of Mathematics, (U.)*  
 537 Markham Street.
- Â REV. HENRY STANISLAUS BELLISLE, B.A., M.A., CATH. UNIV. OF  
 AMERICA,  
*Professor of Logic, (M.)*  
 St. Michael's College.
- A ' BENJAMIN ARTHUR BENSLEY, B.A., PH.D., COLUMBIA,  
*"Professor of Zoology and Head of the Department of  
 Biology, (U.)*  
 37 Admiral Road.
- H MISS CLARA CYNTHIA BENSON, B.A., PH.D.,  
*Professor of Food Chemistry,*  
 157 Bloor Street West.
- S MAITLAND CREASE BOSWELL, B.A.SC., M.A., HARVARD, PH.D.,  
*Professor of Organic Chemistry in Chemical Engineering,  
 Mining Building.*
- A EDWARD ALEXANDER BOTT, B.A.,  
*Professor of Psychology, and Director of Psycho-  
 logical Laboratory, (U.)*  
 368 Walmer Road.
- D HAROLD KEITH BOX, D.D.S., PH.D.,  
*Professor of Periodontology,*  
 86 Bloor Street West.
- A GEORGE SIDNEY BRETT, M.A., OXON.,  
*Professor of Philosophy and Acting Head of the  
 Department of Philosophy, (U.)*  
 127 Albany Avenue.
- A WALTER THEODORE BROWN, M.A., PH.D., HARVARD,  
*Professor of Ethics, (V.)*  
 398 Eglinton Avenue West.
- M HERBERT ALEXANDER BRUCE, M.D., F.R.C.S., ENG.,  
*Professor of Clinical Surgery,*  
 64 Bloor Street East.
- A MILTON ALEXANDER BUCHANAN, B.A., PH.D., CHICAGO,  
*Professor of Italian and Spanish, (U.)*  
 75 Heathdale Road.
- A ELI FRANKLIN BURTON, B.A., CANTAB, PH.D.,  
*Professor of Physics, (U.)*  
 Weston.
- A JOHN HOME CAMERON, M.A.,  
*Professor of French, (C.)*  
 On leave of absence.

- A REV. HENRY CARR, B.A., LL.D.,  
*Professor of Greek and of History of Philosophy, (M.)*  
 St. Michael's College.
- A GEORGE STRACHAN CARTWRIGHT, C.B., C.M.G.,  
*Director of the Department of Military Studies, (U.)*  
 397 Russell Hill Road.
- A CLARENCE AUGUSTUS CHANT, M.A., PH.D., HARVARD,  
*Professor of Astrophysics, (U.)*  
 201 Madison Avenue.
- A JACQUES CHAPELON, D. ES SC., PARIS,  
*Professeur Agrée in Mathematics, (U.)*  
 72 Madison Avenue.
- S JAMES ROY COCKBURN, M.C., B.A.Sc.,  
*Professor of Descriptive Geometry,*  
 100 Walmer Road.
- A LESLIE CHARLES COLEMAN, B.A., PH.D., GOTTINGEN,  
*Professor of Plant Pathology, (U.)*  
 46 Rowanwood Avenue.
- D FREDERICK JOSEPH CONBOY, D.D.S.,  
*Professor of Dental Praxis,*  
 Spadina House.
- D THOMAS COWLING, M.A., McMASTER, D.D.S.,  
*Professor of Applied Chemistry, Physics and Metallurgy,*  
 1 Grant Street.
- D WILLIAM ERNEST CUMMER, D.D.S.,  
*Professor of Prosthetic Dentistry and Dental Technology,*  
 73 Balsam Avenue.
- A CHARLES TRICK CURRELly, M.A.,  
*Professor of the History of Industrial Art, (U.)*  
 19 Wychwood Park.
- SS JAMES ALFRED DALE, M.A., OXON.,  
*Professor of Social Science,*  
 579 Huron Street.
- A VICTOR DE BEAUMONT, A.M., COLUMBIA,  
*Professor of French, (V.)*  
 11 Stibbard Avenue.
- A ALFRED TENNYSON DELURY, M.A., LL.D., WESTERN,  
*Professor of Mathematics, (U.)*  
 74 St. Albans Street.
- A NORMAN WENTWORTH DEWITT, B.A., PH.D., CHICAGO,  
*Professor of Latin, (V.)*  
 108 Bernard Avenue.

- A MAURICE DEWULF, M.A., PH.D., LL.D., LOUVAIN,  
*Professor of Mediaeval Philosophy, (M.)*  
St. Michael's College.
- Â REV. HENRY THOMAS FORBES DUCKWORTH, M.A., OXON.,  
*Professor of Ancient History, (T.)*  
29A Classic Avenue.
- A OSCAR PELLIAM EDGAR, B.A., PH.D., JOHNS HOPKINS,  
*Professor of English, (V.)*  
286 St. George Street.
- A BARKER FAIRLEY, M.A., LEEDS, PH.D., JENA,  
*Professor of German, (C.)*  
197 Dawlish Avenue.
- M CLARENCE B. FARRAR, A.B., HARVARD, M.D., JOHNS HOPKINS,  
*Professor of Psychiatry,*  
50 Oriole Gardens.
- A JOSEPH HORACE FAULL, B.A., PH.D., HARVARD,  
*Professor of Botany, (U.)*  
11 Queen's Park.
- A CHARLES RYLE FAY, M.A., CANTAB, D.SC., LOND.,  
*Professor of Economic History, (U.)*  
374 Brunswick Avenue.
- A JOHN CHARLES FIELDS, B.A., PH.D., JOHNS HOPKINS, F.R.S.,  
*Research Professor of Mathematics, (U.)*  
190 St. George Street.
- M JOHN GERALD FITZGERALD, M.D., LL.D., QUEEN'S,  
*Professor of Hygiene and Preventive Medicine, Director  
of the Connaught Antitoxin Laboratories, and Director  
of the School of Hygiene,*  
186 Balmoral Avenue.
- A HARRY EGERTON FORD, M.A., PH.D., COLUMBIA,  
*Professor of French, (V.)*  
37 Roxborough Drive.
- M JOHN TAYLOR FOTHERINGHAM, C.M.G., B.A., M.B., M.D., C.M.,  
LL.D., QUEEN'S, TOR.,  
*Professor of the History of Medicine,*  
20 Wellesley Street.
- S PETER GILLESPIE, B.A.Sc., C.E., M.Sc.,  
*Professor of Civil Engineering,*  
358 Davenport Road.
- M PERRY GLADSTONE GOLDSMITH, C.B.E., M.D., C.M.,  
*Professor of Oto-Laryngology,*  
84 Carlton Street.

- M DUNCAN ARCHIBALD LAMONT GRAHAM, M.B.,  
*Professor of Medicine and Clinical Medicine,*  
 Alexandra Apartments, University Avenue.
- D JOSEPH SUTHERLAND GRAHAM, M.B.,  
*Professor of Dental Histology, Pathology and*  
*Bacteriology,*  
 112 St. Clair Avenue West.
- A FREDERICK C. GREEN, M.A., ST. ANDREWS, PH.D., COLOGNE,  
*Professor of French, (C.)*  
 202 Dinnick Crescent.
- S GEORGE ARTHUR GUESS, M.A., QUEEN'S,  
*Professor of Metallurgical Engineering,*  
 Oakville.
- M VICTOR JOHN HARDING, D.Sc., MANCHESTER,  
*Professor of Pathological Chemistry,*  
 451 Blythwood Road.
- S HERBERT EDWARD TERRICK HAULTAIN, C.E.,  
*Professor of Mining Engineering,*  
 156 Glencairn Avenue.
- M VELVIEN EWART HENDERSON, M.A., M.B.,  
*Professor of Pharmacy and Pharmacology,*  
 111 Admiral Road.
- M WILLIAM BELFREY HENDRY, D.S.O., B.A., M.B.,  
*Professor of Obstetrics and Gynaecology,*  
 100 College Street.
- A LLOYD CLIFFORD ARNOTT HODGINS, M.A., TOR., HARVARD,  
*Professor of English, (T.)*  
 316 Glen Road.
- F CLIFTON DURANT HOWE, M.S., VERMONT, PH.D., CHICAGO,  
*Professor of Forestry,*  
 107 Glen Grove Avenue West.
- D GUY G. HUME, D.D.S.,  
*Professor of Orthodontia,*  
 48 Bloor Street East.
- A JAMES GIBSON HUME, B.A., A.M., HARVARD, PH.D., FREIBURG,  
 BADEN,  
*Professor of History of Philosophy, (U.)*  
 On leave of absence.
- M ANDREW HUNTER, M.A., B.Sc., EDIN., M.B., CH.B., EDIN.,  
*Professor of Biochemistry,*  
 14 South Drive.

- A MAURICE HUTTON, M.A., OXON., LL.D.,  
*Professor of Greek, (C.)*  
 50 Prince Arthur Avenue.
- \* D JAMES WESLEY INGRAM, D.D.S.,  
*Professor of Dental Anatomy,*  
 New Toronto.
- A WILLIAM JACKMAN, M.A.  
*Professor of Rural Economics, (U.)*  
 14 Roslin Avenue.
- A FRANCOIS CHARLES ARCHILLE JEANNERET, B.A.,  
*Professor of French, and Acting Head of the Department  
 of French, (C.)*  
 70 St. Albans Street.
- A WILLIAM PAUL MCCLURE KENNEDY, M.A., DUBLIN, OXON, LITT.D.,  
 DUBLIN,  
*Professor of Law and Political Institutions, (U.)*  
 77 Spadina Road.
- A FRANK BOTELER KENRICK, M.A., PH.D., LEIPZIG,  
*Professor of Chemistry, (U.)*  
 77 Lonsdale Road.
- A REV. GEORGE FREDERICK KINGSTON, B.D., KINGS, M.A., PH.D.,  
*Professor of Ethics, (T.)*  
 5 Harbord Street.
- A WILLIAM ALEXANDER KIRKWOOD, M.A., PH.D., HARVARD,  
*Professor of Latin, (T.)*  
 Trinity House.
- A RUPERT EARLE LORING KITTREDGE, A.M., HARVARD,  
*Professor of French, (T.)*  
 Trinity House.
- M OSKAR KLOTZ, M.B., M.D., C.M., MCGILL,  
*Professor of Pathology and Bacteriology,*  
 37 Oriole Parkway.
- H MISS ANNIE LEWISA LAIRD, M.S., DREXEL,  
*Professor of Household Science,*  
 157 Bloor Street West.
- A WILMOT BURKMAR LANE, M.A., PH.D., WISCONSIN,  
*Professor of Ethics, (V.)*  
 25 Dorval Road.
- A AUGUSTUS EDWARD LANG, M.A.,  
*Professor of the German Language and Literature, (V.)*  
 104 Spadina Road.

- S THOMAS RICHARDSON LOUDON, B.A.Sc.,  
*Professor of Applied Mechanics,*  
 189 Sheldrake Boulevard.
- A WILLIAM JAMES LOUDON, B.A.,  
*Professor of Mechanics, (U.)*  
 9 Woodlawn Avenue East.
- A REV. ROBERT McBRADY,  
*Professor of Latin, (M.)*  
 St. Michael's College.
- M JAMES METCALFE MACCALLUM, B.A., M.D., C.M.,  
*Professor of Ophthalmology,*  
 13 Bloor Street West.
- A REV. EDMUND JOSEPH McCORKELL, B.A., M.A., CATH. UNIV. OF  
 AMERICA,  
*Professor of English and of Social Ethics, (M.)*  
 St. Michael's College.
- A ROBERT MORRISON MACIVER, B.A., OXON., M.A., D.PHIL., EDIN.,  
*Professor of Political Economy and Head of the De-*  
*partment of Political Economy, (U.)*  
 7 Wellwood Avenue.
- A MICHAEL ALEXANDER MACKENZIE, M.A., TOR., CANTAB.,  
*Professor of Mathematics, (U.)*  
 1 Bellwoods Park.
- A REV. JOHN FLETCHER McLAUGHLIN, B.A., D.D., VIC.,  
*Professor of Oriental Languages and Literature, (V.)*  
 58 Roxborough Street West.
- A JOHN CUNNINGHAM McLENNAN, O.B.E., PH.D., D.Sc., MAN-  
 CHESTER, LL.D., F.R.S.,  
*Professor of Physics, and Director of the Physical*  
*Laboratory, (U.)*  
 88 Prince Arthur Avenue.
- A JOHN JAMES RICKARD MACLEOD, M.B., CH.B., LL.D., ABERDEEN,  
 M D.Sc., F.R.S.,  
*Professor of Physiology, (U.)*  
 45 Nanton Avenue.
- A JOHN WALKER MACMILLAN, B.A., D.D.,  
*Professor of Sociology, (V.)*  
 190 Dawlish Avenue.
- A JAMES PLAYFAIR McMURRICH, M.A., PH.D., JOHNS HOPKINS,  
 M LL.D., MICHIGAN, CINN.,  
*Professor of Anatomy, (U.) and Director of the Ana-*  
*tomical Department,*  
 75 Forest Hill Road.



- M ERNEST G. MARTIN, PH.B., HAMLINE, PH.D., JOHNS HOPKINS,  
*Exchange Professor in Physiology, (Easter Term)*  
 74 St. George Street.
- D ARNOLD DENBOW ALFRED MASON, D.D.S.,  
*Professor of Clinical Dentistry,*  
 86 Bloor Street West.
- A THEOPHILE JAMES MEEK, B.A., B.D., PH.D., CHICAGO,  
*Professor of Oriental Languages, (C.)*  
 Apt. 8, 32 Admiral Road.
- A REV. SAMUEL ALFRED BROWNE MERCER, B.A., HARVARD, C.E.,  
 M.A., WISCONSIN, D.D., NASHOTAH, PH.D., MUNICH,  
*Professor in the Department of Oriental Languages and  
 Egyptology, (T.)*  
 Trinity College.
- A WILLIAM LASH MILLER, B.A., PH.D., MUNICH,  
*Professor of Physical Chemistry, (U.)*  
 8 Hawthorne Avenue.
- A WILLIAM STAFFORD MILNER, M.A.,  
*Professor of Greek and Roman History, (C.)*  
 74 Grenville Street.
- A ELWOOD S. MOORE, M.A., PH.D., CHICAGO,  
*Professor of Economic Geology, (U.)*  
 16 Indian Grove.
- A JOSEPH THOMAS MUCKLE, M.A., CATH. UNIV. OF AMERICA,  
*Professor of Latin, (M.)*  
 St. Michael's College.
- A REV. WILLIAM HUDSON MURRAY, B.A., L'EN PH., UNIVERSITÉ  
 CATHOLIQUE DE PARIS,  
*Professor of French, (M.)*  
 St. Michael's College.
- A GEORGE HENRY NEEDLER, B.A., PH.D., LEIPZIG,  
*Professor of German, (C.)*  
 103 Bedford Road.
- A GILBERT NORWOOD, M.A., CANTAB.,  
*Professor of Latin, (C.)*  
 72 Madison Avenue.
- E WILLIAM PAKENHAM, B.A., LL.D.,  
*Professor of School Administration,*  
 106 Spadina Road.

- A WILLIAM ARTHUR PARKS, B.A., PH.D.,  
*Professor of Geology and Head of the Department of  
 Geology, (U.)*  
 69 Albany Avenue.
- D EDGAR WATSON PAUL, D.D.S.,  
*Professor of Dental Surgery and Anaesthesia,*  
 205 Yonge Street.
- A GERALD BERNARD PHELAN, S.T.B., CATH. UNIV. OF AMERICA, M.A.,  
 ST. FRANCIS XAVIER, PH.D., LOUVAIN, AGRÉGÉ DE L'INSTITUT  
 SUPÉRIEUR DE PHILOSOPHIE, LOUVAIN,  
*Professor of Psychology, (M.)*  
 St. Michael's College.
- A WILLIAM HUNTER PIERSOL, B.A., M.B.,  
 M *Professor of Histology and Embryology, (U.)*  
 35 Dunvegan Road.
- A WILLIAM ARTHUR POTTER, M.A., B.D.,  
*Professor of Oriental Languages and Literature, (V.)*  
 244 Sheldrake Boulevard.
- S HAROLD WILBERFORCE PRICE, B.A.Sc.,  
*Professor of Electrical Engineering,*  
 474 Palmerston Boulevard.
- M ALEXANDER PRIMROSE, C.B., M.B., C.M., EDIN., F.R.C.S., ENG.,  
 LL.D., EDIN.,  
*Professor of Clinical Surgery,*  
 100 College Street.
- A REV. WILLIAM JOSEPH ROACH, B.A.,  
*Professor of Ethics, (M.)*  
 St. Michael's College.
- A JOHN CHARLES ROBERTSON, M.A.,  
*Professor of the Greek Language and Philosophy, (V.)*  
 409 Brunswick Avenue.
- S THOMAS REEVE ROSEBRUGH, M.A.,  
*Professor of Electrical Engineering,*  
 92 Walmer Road.
- M ROBERT DAWSON RUDOLF, C.B.E., M.D., C.M., EDIN., F.R.C.P.,  
 LOND.,  
*Professor of Therapeutics,*  
 100 College Street.
- E PETER SANDIFORD, M.Sc., MANCHESTER, PH.D., COLUMBIA,  
*Professor of Educational Psychology,*  
 14 Rosemount Avenue.

- A JOHN SATTERLY, M.A., CANTAB, D.Sc., LOND.,  
*Professor of Physics, (U.)*  
 95 Bernard Avenue.
- D WALLACE SECCOMBE, D.D.S.,  
*Professor of Preventive Dentistry,*  
 102 Wells Hill Avenue.
- A JAMES EUSTACE SHAW, A.B., PH.D., JOHNS HOPKINS,  
*Professor of Italian and Spanish, (U.)*  
 75 Walmer Road.
- M GIBSON SILVERTHORN, M.B.,  
*Professor of Medical Jurisprudence,*  
 Obil.
- A HERBERT CLAYTON SIMPSON, B.A., OXON, M.A., TOR., HARVARD,  
*Professor of English Literature, (T.)*  
 635 Huron Street.
- A CHARLES BRUCE SISSONS, B.A., LL.D., OTTAWA,  
*Professor of Ancient History, (V.)*  
 64 Admiral Road.
- M CLARENCE LESLIE STARR, M.B., M.D., BELLEVUE, N.Y., LL.D.,  
 McMASTER,  
*Professor of Surgery and Head of the Department of Surgery,*  
 185 Teddington Park.
- M FREDERICK NEWTON GISBORNE STARR, C.B.E., M.B., M.D., C.M.,  
*Professor of Clinical Surgery, (Part-time.)*  
 112 College Street.
- S LOUIS BEAUFORT STEWART,  
*Professor of Surveying and Geodesy,*  
 38 St. Germain Avenue.
- A WILLIAM ROBERT TAYLOR, M.A., PH.D.,  
*Professor of Oriental Languages, (C.)*  
 221 Stibbard Avenue.
- A ROBERT BOYD THOMSON, B.A.,  
*Professor of Phanerogamic Botany, (U.)*  
 586 Spadina Avenue.
- A FREDERICK TRACY, B.A., PH.D., CLARK,  
*Professor of Ethics, (C.)*  
 173 Walmer Road.
- A EDMUND MURTON WALKER, B.A., M.B.,  
*Professor of Invertebrate Zoology, (U.)*  
 67 Alcina Avenue.

- A THOMAS LEONARD WALKER, M.A., QUEEN'S, PH.D., LEIPZIG,  
*Professor of Mineralogy and Petrography, (U.)*  
 20 Avondale Avenue.
- A MALCOLM WILLIAM WALLACE, B.A., PH.D., CHICAGO,  
*Professor of English, (C.)*  
 91 Walmer Road.
- M HARDOLPH WASTENEYS, PH.D., COLUMBIA,  
*Professor of Biochemistry,*  
 20 Howland Avenue.
- D ALBERT EDWARD WEBSTER, M.D., D.D.S., CHICAGO,  
*Professor of Operative Dentistry,*  
 45 Glen Elm Avenue.
- A JOSEPH STANLEY WILL, B.A., PH.D., COLUMBIA,  
*Professor of French, (C.)*  
 56 Ranleigh Avenue.
- A SIR BERTRAM COGHILL ALAN WINDLE, M.A., M.D., SC.D., DUBLIN,  
 PH.D., ROME, M.SC., LL.D., BIRMINGHAM, ROYAL UNIVERSITY,  
 IRELAND, BOSTON, F.R.S.,  
*Professor of Anthropology, (M.)*  
 48 Roselawn Avenue.
- A JOHN NEVILLE WOODCOCK, M.A., OXON.,  
*Professor of Latin, (T.)*  
 220 Glen Road.
- S CHARLES HENRY CHALLENGER WRIGHT, B.A.SC.,  
*Professor of Architecture,*  
 419 Markham Street.
- A GEORGE MACKINNON WRONG, M.A., LL.D., MCGILL,  
*Professor of History, (U.)*  
 73 Walmer Road.
- A ARCHIBALD HOPE YOUNG, M.A., D.C.L., KING'S COLLEGE,  
*Professor of German, (T.)*  
 524 Euclid Avenue.
- S CLARENCE RICHARD YOUNG, B.A.SC., C.E.,  
*Professor of Structural Engineering,*  
 98 Hilton Avenue.

## ASSOCIATE PROFESSORS

- A SINCLAIR MACLARDY ADAMS, M.A.,  
*Associate Professor of Greek, (T.)*  
 89 St. Joseph Street.
- S EDGAR ALFRED ALLCUT, M.SC., BIRMINGHAM,  
*Associate Professor of Mechanical Engineering,*  
 50 St. George Street.

- A LOUIS ALLEN, M.A., PH.D., CHICAGO,  
*Associate Professor of French, (C.)*  
61 Madison Avenue.
- S EDWARD GOWAN RUSSELL ARDAGH, B.A.SC.,  
*Associate Professor of Chemical Engineering,*  
148 Howard Park Avenue.
- M ALAN BROWN, M.B.,  
*Associate Professor of Medicine in Charge of Pediatrics,*  
217 St. Clair Avenue West.
- A ALEXANDER GRANT BROWN, B.A., M.A., OXON.,  
*Associate Professor of Ancient History, (C.)*  
596 Huron Street.
- A JAMES TRESAWNA BURT-GERRANS, PHM.B., PH.D.,  
*Associate Professor of Electro-Chemistry, (U)*  
46 Dewson Street.
- D FREDERICK ARNOLD CLARKSON, M.B.,  
*Associate Professor of Medicine,*  
421 Bloor Street West.
- A WILLIAM HALL CLAWSON, B.A., NEW BRUNSWICK, M.A., PH.D.,  
HARVARD,  
*Associate Professor of English, (C.)*  
96 Oakwood Avenue.
- A CHARLES NORRIS COCHRANE, B.A., M.A., OXON.,  
*Associate Professor of Ancient History, (C.)*  
Dean's House, University College.
- E FREDERICK ETHEBERT COOMBS, M.A.,  
*Associate Professor of Methods in Elementary Education,*  
158 Delaware Avenue.
- D JAMES WELDON CORAM, D.D.S.,  
*Associate Professor of Operative Dentistry,*  
81 Pleasant Boulevard.
- E GEORGE AUGUSTUS CORNISH, B.A.,  
*Associate Professor of Methods in Science,*  
95 Dinnick Crescent.
- A ALAN FREETH COVENTRY, B.A., OXON.,  
*Associate Professor of Vertebrate Embryology, (U.)*  
Hart House, University of Toronto.
- E JOHN THOMAS CRAWFORD, B.A.,  
*Associate Professor of Methods in Mathematics,*  
168 Walmer Road.

- S SAMUEL RUTHERFORD CRERAR, B.A.Sc.,  
*Associate Professor of Surveying,*  
 122 Grenadier Road.
- A ERNEST ABELL DALE, M.A., OXON.,  
*Associate Professor of Latin, (C.)*  
 576 Huron Street.
- A HERBERT JOHN DAVIS, M.A., OXON.,  
*Associate Professor of English, (C.)*  
 206 Dawlish Avenue.
- A SAINT-ELME DE CHAMP, B ÈS L, LYONS, O.I.P.,  
*Associate Professor of French, (C.)*  
 90 St. George Street.
- M ROBERT DAVIES DEFRIES, M.D., D.P.H.,  
*Associate Professor of Hygiene and Associate Director  
 of the Connaught Antitoxin Laboratories,*  
 135 Collier Street.
- A DAVID DUFF, M.A., B.D., EDINBURGH,  
*Associate Professor of Latin, (C.)*  
 85 Woodlawn Avenue West.
- F THEODORE WOOLSEY DWIGHT, B.Sc.F., M.F., YALE,  
*Associate Professor of Forestry,*  
 12 Lytton Boulevard.
- R JOHN BRIGHT FERGUSON, B.A.,  
*Associate Professor of Chemistry,*  
 511 Christie Street.
- E WILLIAM CHALMERS FERGUSON, B.A.,  
*Associate Professor of Methods in Modern Languages,*  
 42 Wychwood Park.
- A RALPH FLENLEY, M.A., LIVERPOOL, B.LITT., OXON.,  
*Associate Professor of History, (U.)*  
 40 De Lisle Avenue.
- A LACHLAN GILCHRIST, M.A., PH.D., CHICAGO,  
*Associate Professor of Physics, (U.)*  
 North House, University of Toronto.
- A EMILIO GOGGIO, A.B., HARVARD, M.A., TOR., PH.D., HARVARD,  
*Associate Professor of Italian and Spanish, (U.)*  
 341 Roehampton Avenue.
- M WILLIAM GOLDIE, M.B.,  
*Associate Professor of Clinical Medicine,*  
 86 College Street.
- D EDMUND ALEXANDER GRANT, D.D.S.,  
*Associate Professor of Prosthetic Dentistry,*  
 86 Bloor Street West.

- A DOUGLAS EWART HAMILTON, M.A., D.PAED.,  
*Associate Professor of Greek, (C.)*  
 528 Palmerston Boulevard.
- A THURE HEDMAN, PH.B., CHICAGO,  
*Associate Professor of German, (C.)*  
 Old Forest Hill Road.
- M WILLIAM LUDLOW HOLMAN, B.A., M.D., C.M., MCGILL,  
*Associate Professor of Bacteriology, and Associate  
 Director of Applied Pathology,*  
 10 Oriole Gardens.
- A ARCHIBALD GOWANLOCK HUNTSMAN, B.A., M.B.,  
*Associate Professor of Marine Biology, (U.)*  
 217 Indian Road.
- A GILBERT EDWARD JACKSON, B.A., CANTAB.,  
*Associate Professor of Political Economy, and Supervisor  
 of Studies for the course in Commerce and Finance,  
 (U.)*  
 165 Roxborough Street West.
- E GEORGE MALLORY JONES, B.A.,  
*Associate Professor of Methods in English and  
 History,*  
 164 Walmer Road.
- A ROBERT STRACHAN KNOX, M.A., ABERDEEN, B.A., OXON.,  
*Associate Professor of English, (C.)*  
 24 Avoca Avenue.
- A ALEXANDER LACEY, M.A., COLUMBIA, PH.D.,  
*Associate Professor of French, (V.)*  
 156 Felstead Avenue.
- S ALBERT THOMAS LAING, B.A.Sc.,  
*Associate Professor of Highway Engineering,*  
 146 Balmoral Avenue.
- M ERIC AMBROSE LINELL, M.B., CH.B., M.D., MANCHESTER,  
*Associate Professor of Anatomy,*  
 91 McPherson Avenue.
- A JOHN FORD MACDONALD, M.A.,  
*Associate Professor of English, (C.)*  
 99 Hilton Avenue.
- M KENNEDY CRAWFORD MCILWRAITH, M.B.,  
*Associate Professor of Obstetrics,*  
 30 Prince Arthur Avenue.

- A NORMAN ARCHIBALD MACRAE MACKENZIE, B.A., LL.D., DALHOUSIE,  
LL.M., HARVARD,  
*Associate Professor of Law, (U.)*  
40 Charles Street East.
- A ALEXANDER MACLEAN, B.A.,  
*Associate Professor of Geology, (U.)*  
60 St. George Street.
- A HENRY ALLEN McTAGGART, M.A., PH.D., B.A., CANTAB.,  
*Associate Professor of Physics, (U.)*  
39 Chaplin Crescent.
- A M. MARGARITA, B.A.,  
*Associate Professor of Anglo-Saxon, (M.)*  
387 Brunswick Avenue.
- M FREDERICK WILLIAM MARLOW, M.D., C.M., F.R.C.S.,  
*Associate Professor of Gynaecology,*  
417 Bloor Street West.
- F WILLIS NORMAN MILLAR, B.Sc., PENN., M.F., YALE,  
*Associate Professor of Forestry,*  
R. R. No. 2, Oakville.
- M JAMES MONTROSE DUNCAN OLMSTED, M.A., OXON., PH.D.,  
HARVARD,  
*Associate Professor of Physiology,*  
East House, University of Toronto.
- A ERIC TREVOR OWEN, M.A.,  
*Associate Professor of Greek, (C.)*  
49 Alcina Avenue.
- S JOHN HAMILTON PARKIN, B.A.Sc., M.E.,  
*Associate Professor of Mechanical Engineering,*  
12 Hudson Drive.
- A ARTHUR LEONARD PARSONS, A.B., NEW YORK,  
*Associate Professor of Mineralogy, (U.)*  
79 Oriole Road.
- A M. PERPETUA, M.A.,  
*Associate Professor of English, (M.)*  
St. Joseph's College, St. Albans Street.
- A IRVINE RUDSDALE POUNDER, M.A., PH.D., CHICAGO,  
*Associate Professor of Mathematics, (U.)*  
19 Glen Gordon Road.
- A EDWIN JOHN PRATT, M.A., PH.D.,  
*Associate Professor of English, (V.)*  
25 Tullis Drive.



- D FULTON ERNEST RISDON, M.B., D.D.S.,  
*Associate Professor of Oral Surgery,*  
30 Avenue Road.
- A JOHN DANIEL ROBINS, M.A.,  
*Associate Professor of English, (V.)*  
187 Lauder Avenue.
- A THOMAS RUTHERFORD ROBINSON, B.A., PH.D.,  
*Associate Professor of Philosophy, (U.)*  
9 Barton Avenue.
- A LINNÆUS JOSLYN ROGERS, B.A.Sc., M.A.,  
*Associate Professor of Chemistry, (U.)*  
29 Rosemount Avenue.
- A MISS MARY COYNE ROWELL, M.A.,  
*Associate Professor of French, (V.)*  
101 Madison Avenue.
- M GILBERT ROYCE, B.A., M.B.,  
*Associate Professor of Oto-Laryngology,*  
100 College Street.
- A MISS LAILA CORDELIA SCOTT, M.A.,  
*Associate Professor of German, (T.)*  
13 Admiral Road.
- A GEORGE MALCOLM SMITH, M.C., B.A., M.A., OXON.,  
*Associate Professor of History, (U.)*  
11 Washington Avenue.
- A GEORGE OSWALD SMITH, M.A., OXON.,  
*Associate Professor of Latin, (C.)*  
25 Rathnally Avenue.
- M HORACE BRADBURY SPEAKMAN, M.Sc., MANCHESTER,  
*Associate Professor of Zymology and Director of  
Research in Zymology,*  
61 Walmsley Boulevard.
- M NORMAN BURKE TAYLOR, M.B.,  
*Associate Professor of Physiology,*  
45 Lascelles Boulevard.
- S WILLIAM MANTON TREADGOLD, B.A.,  
*Associate Professor of Surveying,*  
13 Woodlawn Avenue East.
- D WILLIAM GLENN TRULFORD, D.D.S.,  
*Associate Professor of Periodontology,*  
86 Bloor Street West.
- A REV. JOSEPH BASIL WALSH, B.A., M.A., CATH. UNIV. OF AMERICA,  
*Associate Professor of Latin, (M.)*  
St. Michael's College.

- M JAMES CRAWFORD WATT, M.A., M.D.,  
*Associate Professor of Anatomy,*  
 20 Hawthorne Avenue.
- A REV. EMIL JEROME WELTY, B.A., WESTERN, M.A.,  
*Associate Professor of German, (M.)*  
 St. Michael's College.
- F JAMES HERBERT WHITE, M.A., B.Sc.F., PH.D.,  
*Associate Professor of Forestry,*  
 75 Browning Avenue.
- D WALTER EARL WILLMOTT, D.D.S., TOR. AND PHILADELPHIA,  
*Associate Professor of Prosthetic Dentistry,*  
 27 Glen Elm Avenue.
- A REYNOLD KENNETH YOUNG, B.A., PH.D., CALIFORNIA,  
*Associate Professor of Astronomy, (U.)*  
 Apt. 44, 96 Isabella Street.

## ASSISTANT PROFESSORS

- A FULTON HENRY ANDERSON, B.A., DAL., M.A., PH.D.,  
*Assistant Professor of Philosophy, (U.)*  
 176 Spadina Road.
- A JOHN GORDON ANDISON, B.A., MAN., M.A., PH.D., COLUMBIA,  
*Assistant Professor of French, (C.)*  
 45 Bernard Avenue.
- S ERIC ROSS ARTHUR, M.A., B.Arch., LIVERPOOL,  
*Assistant Professor of Architecture,*  
 158 Albany Avenue.
- A WILLIAM HAROLD TREVORROW BAILLIE, M.A., M.B.,  
*Assistant Professor of Mammalian Anatomy, (U.)*  
 53 Boon Avenue.
- S ERNEST WALDEMAR BANTING, B.A.Sc.,  
*Assistant Professor of Surveying,*  
 101 Farnham Avenue.
- M HENRY ALBERT BEATTY, M.B.,  
*Assistant Professor of Surgery,*  
 52 Howland Avenue.
- M CHARLES HERBERT BEST, M.A., M.B.,  
*Assistant Professor in Physiological Hygiene in School  
 of Hygiene, and Assistant Director of the Con-  
 naught Antitoxin Laboratories,*  
 226 Rosedale Heights Drive.

- A WILHELM ERNST BLATZ, M.A., M.B., PH.D., CHICAGO,  
*Assistant Professor of Psychology, (U.) Part-time,*  
32 Burnside Drive.
- A JUAN CANO, A.B., TOLEDO, A.M., COLUMBIA,  
*Assistant Professor of Italian and Spanish, (U.)*  
41 Roslin Avenue.
- E JOHN OLIVER CARLISLE, M.A.,  
*Assistant Professor of Methods in Classics,*  
17 Kendal Avenue.
- M HARRY ARTHUR CATES, M.B.,  
*Assistant Professor of Anatomy,*  
Weston.
- M FREDERICK ARNOLD CLARKSON, M.B.,  
*Assistant Professor of Clinical Medicine,*  
421 Bloor Street West.
- M FREDERICK ADAM CLELAND, B.A., M.B.,  
*Assistant Professor of Obstetrics and Gynaecology,*  
131 Bloor Street West.
- A EDWARD HORNE CRAIGIE, B.A., PH.D.,  
*Assistant Professor of Comparative Anatomy and*  
*Neurology, (U.)*  
40 Leopold Street.
- A GEORGE HENRY DUFF, M.A., PH.D.,  
*Assistant Professor of Plant Physiology, (U.)*  
325 Kendal Avenue.
- S FREDERICK CHARLES DYER, B.A.Sc.,  
*Assistant Professor of Mining Engineering,*  
233 Ashworth Avenue.
- A JOHN RICHARDSON DYMOND, M.A.,  
*Assistant Professor of Systematic Zoology, (U.)*  
205 Cottingham Street.
- M DONALD THOMAS FRASER, M.C., B.A., M.B., D.P.H.,  
*Assistant Professor of Hygiene and Preventive Medicine,*  
*and Assistant Director of the Connaught Antitoxin*  
*Laboratories,*  
190½ Lowther Avenue.
- M NICHOLAS D'ARCY FRAWLEY, M.B.,  
*Assistant Professor of Obstetrics and Gynaecology,*  
128 Forest Hill Road.
- A WILLIAM STANLEY FUNNELL, M.A.,  
*Assistant Professor of Chemistry, (U.)*  
348 Davenport Road.

- M WILLIAM EDWARD GALLIE, M.D., F.R.C.S.,  
*Assistant Professor of Clinical Surgery,*  
 143 College Street.
- A MISS CORNELIA HARCUM, B.A., GOUCHER, PH.D., JOHNS HOPKINS,  
*Assistant Professor of the History of Industrial Art,*  
 (U.)  
 Obit.
- A GEOFFREY ELWOOD HOLT, M.A., MUS.BAC.,  
*Assistant Professor of German, (C.)*  
 20 Nanton Avenue
- M GOLDWIN WILLIAM HOWLAND, B.A., M.B.,  
*Assistant Professor of Medicine,*  
 147 Bloor Street West.
- M GEORGE HUNTER, M.A., B.Sc., B.Sc. (AGRIC.), GLASGOW,  
*Assistant Professor of Pathological Chemistry,*  
 48 Duggan Avenue.
- A HAROLD ADAMS INNIS, M.A., MCMASTER, PH.D., CHICAGO,  
*Assistant Professor of Political Economy, (U.)*  
 128 Chudleigh Avenue.
- A WILLIAM ANDREW IRWIN, M.A., D.B., PH.D., CHICAGO,  
*Assistant Professor of Semitics, (C.)*  
 71 Wanless Crescent.
- M WILLIAM WARNER JONES, B.A., M.B., F.R.C.S.,  
*Assistant Professor of Clinical Surgery,*  
 41 Avenue Road.
- A HUBERT RICHMOND KEMP, M.A.,  
*Assistant Professor of Political Economy, (U.)*  
 9 Baker Avenue.
- S JAMES THOMAS KING, B.A.Sc.,  
*Assistant Professor of Mining Engineering,*  
 126 Manor Road East.
- M WILLIAM HERBERT LOWRY, M.D., C.M.,  
*Assistant Professor of Ophthalmology,*  
 100 College Street.
- M GEORGE HERBERT WILLIAM LUCAS, PH.D.,  
*Assistant Professor in Pharmacology,*  
 213 Lauder Avenue.
- A WILLIAM JOHN McANDREW, M.A.,  
*Assistant Professor of French, (C.)*  
 144 Balliol Street.

- A JOHN WOOD MACARTHUR, A.B., OBERLIN, M.A., WABASH, PH.D.,  
CHICAGO,  
*Assistant Professor of Genetics, (U.)*  
319 Roehampton Avenue.
- A THOMAS FORSYTH MCILWRAITH, M.A., CANTAB.,  
*Assistant Professor of Anthropology, (U.)*  
46 Summerhill Gardens.
- A HERBERT SUTHERLAND MCKELLAR, B.A.,  
*Assistant Professor of French, (C.)*  
114 St. Clement's Avenue.
- M DUNCAN NEIL MACLENNAN, M.D., C.M.,  
*Assistant Professor of Ophthalmology,*  
126 Bloor Street West.
- A EARLE DOUGLAS MACPHEE, M.A., B.ED., EDIN.,  
*Assistant Professor of Psychology, (U.)*  
63 Keewatin Avenue.
- E WALTER ERNEST MACPHERSON, B.A., LL.B., QUEEN'S,  
*Assistant Professor of Education,*  
172 Walmer Road.
- S HENRY HARRISON MADILL, B.A.Sc.,  
*Assistant Professor of Architecture,*  
1344 Mount Pleasant Road.
- A WILLIAM HOWARD MARTIN, M.A., PH.D.,  
*Assistant Professor of Chemistry, (U.)*  
113 Grenadier Road.
- M PETER JOSEPH MOLONEY, M.A., PH.D.,  
*Assistant Professor of Hygiene, (Part-time) and Assistant  
Director of the Connaught Antitoxin Laboratories,*  
Scarborough Bluffs.
- S ROBERT J. MONTGOMERY, CER.E., OHIO,  
*Assistant Professor of Ceramics,*  
46 Atlas Avenue.
- S JOHN ARTHUR NEWCOMBE, B.Sc., LONDON, ASSOC. R.S.M.,  
*Assistant Professor of Metallurgy,*  
2215 Gerrard Street East.
- E MISS LAURA LAVINIA OCKLEY, B.A.,  
*Assistant Professor of Household Science,*  
50 Rosemount Avenue.
- M JOHN ALLAN OILE, M.D.,  
*Assistant Professor of Medicine,*  
69 South Drive.

- A GORDON CUMMINGS PATTERSON, M.C., B.A.,  
*Assistant Professor of Italian and Spanish, (U.)*  
 166 High Park Avenue.
- M WILLIAM LIPSETT ROBINSON, B.A., MCMASTER, M.B.,  
*Assistant Professor of Pathology, and Associate Director  
 of Applied Pathology,*  
 18 Doncliffe Drive.
- D EDWARD STANLEY RYERSON, M.D., C.M.,  
*Assistant Professor of Surgery,*  
 14 De Lisle Avenue.
- A NORRIS EDWARD SHEPPARD, M.A.,  
*Assistant Professor of Mechanics, (U.)*  
 216 Keele Street.
- A HAROLD BOYD SIFTON, M.A., PH.D.,  
*Assistant Professor of Botany, (U.)*  
 10 Rathnally Avenue.
- M GIDEON SILVERTHORN, M.B.,  
*Assistant Professor in Clinical Surgery,*  
 (Obit.)
- M DAVID KING SMITH, M.B.,  
*Assistant Professor of Medicine,*  
 122 Bloor Street West.
- S WILLIAM JAMES SMITHER, B.A.Sc.,  
*Assistant Professor of Structural Engineering,*  
 11 Sussex Court Apartments.
- S ROSS TAYLOR, B.A.Sc.,  
*Assistant Professor of Mechanical Engineering,*  
 6 Burnside Drive.
- A JOSEPH ELLIS THOMSON, B.A.Sc.,  
*Assistant Professor of Mineralogy, (U.)*  
 32A Prince Arthur Avenue.
- S JAMES EDWIN TOOMER, B.Sc., NORTH CAROLINA,  
*Assistant Professor of Metallurgy,*  
 190 St. George Street.
- A WILLIAM JOHN WEBBER, B.A., CANTAB.,  
*Assistant Professor of Mathematics, (U.)*  
 1053 Yonge Street.
- M ROBERT WATSON WESLEY, M.B.,  
*Assistant Professor of Obstetrics and Gynaecology,*  
 2 Spadina Road.
- H MISS ALICE C. WILLARD, A.M., KNOX (ILL.), S.M., PH.D., CHICAGO,  
*Assistant Professor of Household Science,*  
 315 Avenue Road.

- S WILLIAM JAMES TURNBULL WRIGHT, M.B.E., B.A.Sc.,  
*Assistant Professor of Engineering Drawing,*  
 126 Melrose Avenue.
- A HUMPHREY HUME WRONG, B.A., TOR., OXON., B.LITT., OXON.,  
*Assistant Professor of History, (U.)*  
 122 Walmer Road.
- M GEORGE SILLS YOUNG, B.A., M.B.,  
*Assistant Professor of Medicine,*  
 143 College Street.
- S ALBERT RUSSELL ZIMMER, B.A.Sc.,  
*Assistant Professor of Electrical Engineering,*  
 80 Pine Crest Road.

LECTURERS; ASSOCIATES AND DEMONSTRATORS IN  
 MEDICINE AND DENTISTRY

- A MISS MARGARET ELEANOR THEODORA ADDISON, B.A.,  
*Lecturer in German, (V.)*  
 Annesley Hall.
- A M. AGNES, M.A.,  
*Lecturer in French, (M.)*  
 St. Joseph's College.
- M GEORGE HARVEY AGNEW, M.B.,  
*Junior Demonstrator in Medicine and Clinical Medicine,*  
 901 Ossington Avenue.
- D WILMOR BERTRAND AMY, D.D.S.,  
*Associate in Dental Surgery and Anaesthesia,*  
 147 Bloor Street West.
- M ROBERT GARDINER ARMOUR, B.A., M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 96 College Street.
- A M. ATHANASIA, M.A., DE PAUL,  
*Lecturer in English, (M.)*  
 387 Brunswick Avenue.
- M FREDERICK ALLEN AYLESWORTH, M.D., C.M., QUEEN'S,  
*Senior Demonstrator in Ophthalmology,*  
 112 College Street.
- M HAROLD DEWITT BALL, M.B.,  
*Demonstrator in Histology,*  
 86 Bloor Street West.
- M GORDON BATES, M.B.,  
 P *Junior Demonstrator in Medicine and Clinical Medicine,*  
*and Lecturer in Medicine,*  
 40 Elm Street.

- M JOSEPH EDGAR BATES, B.A., MCMASTER, M.B.,  
*Lecturer in Pathology,*  
 81 Sherwood Avenue.
- D GARNET DOUGLAS BEIERL, D.D.S., MICHIGAN,  
*Demonstrator in Dentistry,*  
 255 Runnymede Road.
- M FREDERICK JUDSON BELL, B.A., M.B.,  
*Demonstrator in Anatomy and in Histology,*  
 436 Avenue Road.
- A M. BIRCHMANS, B.A., M.A., CHICAGO,  
*Lecturer in French, (M.)*  
 387 Brunswick Avenue.
- A M. BERNARD, M.A.,  
*Lecturer in French, (M.)*  
 St. Joseph's College.
- R CHARLES HERBERT BEST, M.A., M.B.,  
*Research Associate in Banting and Best Research,*  
 226 Rosedale Heights Drive.
- M GEORGE MAITLAND BIGGS, M.B.,  
*Associate in Oto-Laryngology,*  
 341 Bloor Street West.
- A VINCENT WHEELER BLADEN, M.A., OXON.,  
*Lecturer in Political Economy, (U.)*  
 Hart House, University of Toronto.
- M DAVID HARVEY BODDINGTON, M.B.,  
*Demonstrator in Pathological Chemistry,*  
 333 Bloor Street West.
- D JOHN ALEXANDER BOTHWELL, D.D.S.,  
*Associate in Dentistry,*  
 86 Bloor Street West.
- D ROBERT MUIRHEAD BOX, D.D.S.,  
*Associate in Periodontology,*  
 86 Bloor Street West.
- M EDMUND BOYD, B.A., M.B., L.R.C.P.,  
*Associate in Oto-Laryngology,*  
 36 Prince Arthur Avenue.
- M MISS GLADYS LILLIAN BOYD, M.D., B.Sc. (MED.),  
*Junior Demonstrator in Pediatrics,*  
 54 De Lisle Avenue.
- M GEORGE FLORIAN BOYER, M.D.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 143 College Street.



- A ALEXANDER BRADY, B.A., OXON., M.A., PH.D., TOR.,  
*Lecturer in Political Economy, (U.)*  
 8 Rathnally Avenue.
- E GEORGE NEVILLE BRAMPITT, B.A., B.PAED.,  
*Lecturer in Music,*  
 35 Munro Park Avenue.
- M ERNEST ALFRED BROUGHTON, M.B.,  
*Junior Demonstrator in Medecine and Clinical Medicine,*  
 206 Bloor Street West.
- P ALAN BROWN, M.B.,  
*Lecturer in Infant Hygiene,*  
 217 St. Clair Avenue West.
- A GEORGE WILLIAMS BROWN, B.A., M.A., PH.D., CHICAGO,  
*Lecturer in History, (U.)*  
 65 Heath Street East.
- M WILLIAM EASSON BROWN, M.B., M.A.,  
*Junior Demonstrator in Anaesthesia,*  
 10 Carlton Street.
- M HOWARD BURNHAM, M.B.,  
*Junior Demonstrator in Oto-Laryngology, and Assistant  
 in Oto-Rhinolaryngology,*  
 96 College Street.
- M JOHN CAMPBELL CALHOUN, M.B.,  
*Senior Demonstrator in Oto-Laryngology,*  
 155 Bloor Street East.
- M GORDON CAMPBELL CAMERON, M.D.,  
*Lecturer in Bacteriology,*  
 65 Hilton Avenue.
- M IRVING HEWARD CAMERON, M.B., LL.D., EDIN., F.R.C.S., ENG.,  
*Special Lecturer in Medical Ethics,*  
 307 Sherbourne Street.
- M MALCOLM HECTORSON VALENTINE CAMERON, M.B.,  
*Associate in Surgery and Clinical Surgery,*  
 11 Prince Arthur Avenue
- M ANGUS ALEXANDER CAMPBELL, M.B.,  
*Senior Demonstrator in Oto-Laryngology,*  
 86 Bloor Street West.
- M WALTER RUGGLES CAMPBELL, M.A., M.D.,  
*Associate in Medicine,*  
 96 College Street.
- M ALAN WOODBURN CANFIELD, M.D., C.M.,  
*Associate in Pediatrics,*  
 462 Avenue Road.

- A MISS MABEL CARTWRIGHT, B.A., LL.D.,  
*Lecturer in English, (T.)*  
 St. Hilda's College.
- M WILLIAM HERBERT CARVETH, M.B.,  
*Junior Demonstrator in Anaesthesia, Department of  
 Therapeutics,*  
 239 College Street.
- M ALFRED HANS WARING CAULFEILD, M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,  
 and Research Member in the Connaught Laboratories,*  
 69 Spadina Road.
- D WILLIAM LOGAN CHALMERS, D.D.S.,  
*Associate in Dental Surgery and Anaesthesia,*  
 1 Charles Street East
- D GRAHAM LEE CHAMBERS, M.B.,  
*Demonstrator in Anatomy,*  
 26 Gerrard Street East.
- A SPERRIN NOAH FULTON CHANT, M.A.,  
*Lecturer in Psychology, (U.)*  
 250 Glenrose Avenue.
- D ARMAN SPENCER CLAPPISON, D.D.S.,  
*Demonstrator in Dentistry,*  
 46 Sun Life Building, Hamilton.
- M HARVEY CLARE, M.D., C.M.,  
*Associate in Psychiatry,*  
 Guelph.
- M ERNEST EDGAR CLEAVER, B.A., M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 155 Bloor Street East.
- S ARTHUR ROGER CLUTE, B.A., LL.B.,  
*Special Lecturer in Limited Companies and Commercial  
 Law,*  
 47 Elgin Avenue.
- M HERBERT ERNEST CLUTTERBUCK, M.D., C.M.,  
*Associate in Surgery and Clinical Surgery,*  
 148 Grace Street.
- A BASIL PHILIP COLCLOUGH, B.A., KING'S COLLEGE,  
*Special Lecturer in French, (V.)*  
 43 Woodside Avenue.
- A MISS AELFREDA COOPER COLE, M.A.,  
*Lecturer in French, (C.)*  
 103 Gloucester Street.

- M EDWARD COOPER COLE, O.B.E., B.A., M.B.,  
*Senior Demonstrator in Therapeutics,*  
320 Bloor Street West.
- D FRANK LETHBRIDGE COLE, D.D.S.,  
*Demonstrator in Dentistry,*  
Apt. 32, Humewood Court.
- D GEORGE HENRY CORAM, D.D.S., CHICAGO, TOR.,  
*Associate in Dentistry,*  
470 Parliament Street.
- D CHARLES ARTHUR CORRIGAN, D.D.S.,  
*Associate in Orthodontia,*  
2 College Street.
- M WARING GERALD COSBIE, M.C., M.B.,  
*Junior Demonstrator in Obstetrics and Gynaecology,*  
115 Inglewood Drive.
- M WILLIAM ALFRED COSTAIN, M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
134 Arlington Avenue.
- M ALAN FREETH COVENTRY, B.A., OXON.,  
*Special Lecturer in Science and Civilization,*  
Hart House, University of Toronto.
- D MICHAEL ARMACOST COX, M.B.,  
*Associate in Preventive Dentistry,*  
34 St. Clair Avenue West.
- M CLARENCE MOFFATT CRAWFORD, B.A., M.D., C.M., QUEEN'S,  
*Junior Demonstrator in Psychiatry,*  
2 Burinn Court, Broadway Avenue.
- S T. LINSEY CROSSLEY,  
*Special Lecturer in Pulp and Paper,*  
28 Lonsdale Road.
- D STANLEY STUART CROUCH, D.D.S.,  
*Associate in Dental Anatomy,*  
86 Bloor Street West.
- M HAMILTON CHALMERS CRUIKSHANK, M.B., D.P.H.,  
*Demonstrator in Hygiene, (Part-time)*  
101 Hillsdale Avenue West.
- D HAROLD HOWARD CUMMER, D.D.S.,  
*Demonstrator in Dentistry,*  
225 St. Clair Avenue West.
- M JOHN GRANT CUNNINGHAM, B.A., M.B., D.P.H.,  
*Demonstrator in Hygiene, (Part-time)*  
156 Evelyn Crescent.

- M WILLIAM ALLAN DAFOE, M.B.,  
*Junior Demonstrator in Obstetrics and Gynaecology,*  
 143 College Street.
- M ERNEST LE ROY DANIHIER, B.A.,  
*Special Lecturer in English Expression,*  
 64 Baby Point Crescent.
- A JAMES FORRESTER DAVISON, B.A., LL.B., DALHOUSIE, LL.M.,  
 HARVARD,  
*Lecturer in Roman Law and Jurisprudence, (U.)*  
 Hart House, University of Toronto.
- M HERBERT KNUDSEN DETWEILER, M.D.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
*and Associate in Serology,*  
 73 Regal Road.
- M WILLIAM HOWARD DICKSON, M.D., C.M., MCGILL,  
*Assistant Demonstrator in Radiology,*  
 58 Lympstone Avenue.
- M HAMNETT ALONZO DIXON, M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 96 College Street.
- A M. DOROTHEA, B.A., QUEEN'S, M.A.,  
*Lecturer in English, (M.)*  
 387 Brunswick Avenue.
- D JOHN HENRY DUFF, D.D.S.,  
*Demonstrator in Dentistry,*  
 86 Bloor Street West.
- M THOMAS ALEXANDER JAMIESON DUFF, M.B., F.R.C.S.,  
*Demonstrator in Surgery and Clinical Surgery,*  
 124 Bloor Street West.
- S WILLIAM BOWIE DUNBAR, B.A.Sc.,  
*Lecturer in Engineering Drawing,*  
 241 Glebeholme Boulevard.
- S HOWARD B. DUNINGTON-GRUBB, B.S.A., CORNELL,  
*Special Lecturer in Landscape Architecture,*  
 1158 Bay Street.
- M JABEZ HENRY ELLIOTT, M.B.,  
 P *Associate in Medicine and Lecturer in Medicine,*  
 11 Spadina Road.
- P MISS FLORENCE H. M. EMORY,  
*Lecturer in Public Health Nursing,*  
 26 Algonquin Avenue.

- A M. ESTELLE, M.A., QUEEN'S,  
*Lecturer in Latin, (M.)*  
387 Brunswick Avenue.
- A WALTER SCOTT FERGUSON,  
S *Lecturer in Accounting, (U.) and Special Lecturer in  
Accountancy and Business,*  
28 Kilbarry Road.
- D BENJAMIN OTTO FIFE, D.D.S.,  
*Associate in Dentistry,*  
66 Evelyn Avenue.
- SS MISS MAE FLEMING,  
*Lecturer in the Department of Social Service,*  
66 Manor Road East.
- M ANDREW ALMON FLETCHER, M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
96 College Street.
- M DONALD ROY FLETCHER, M.D., C.M., QUEEN'S,  
*Junior Demonstrator in Psychiatry,*  
999 Queen Street West.
- A MISS NORMA HENRIETTA CARSWELL FORD, B.A., PH.D.,  
*Lecturer in Biology, (U.)*  
85 St. George Street.
- M JAMES ALEXANDER FORREST, M.B.,  
*Demonstrator in Anatomy,*  
33 Langley Avenue.
- M GORDON S. FOULDS, M.B., M.S., MINNESOTA,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
151 Bloor Street West.
- Ms HERBERT AUSTIN FRICKER, M.A., LEEDS, MUS. DOC.,  
*Lecturer in Choral and Orchestral Music,*  
9 Powell Avenue.
- M ROBERT EDWARD GARY, B.A., M.D.,  
*Demonstrator in Surgery and Clinical Surgery,*  
86 Bloor Street West.
- M JOHN GORDON GALLIE, B.A., M.B.,  
*Associate in Obstetrics and Gynaecology,*  
143 College Street.
- D BERTRAM REUBEN GARDINER, D.D.S.,  
*Associate in Dental Surgery and Anaesthesia,*  
2 Bloor Street East.

- A ARTHUR JAMES GLAZEBROOK,  
*Special Lecturer in Banking and Finance, Department of  
 Political Economy, (U.)*  
 9 Rowanwood Avenue.
- A GEORGE P. DE T. GLAZEBROOK, B.A., TOR., OXON.,  
*Lecturer in History, (U.)*  
 9 Rowanwood Avenue.
- D RICHARD JOHNSTON GODFREY, D.D.S.,  
*Demonstrator in Prosthetic Dentistry,*  
 326 Bloor Street West.
- A ANDREW ROBERTSON GORDON, M.A., PH.D.,  
*Lecturer in Chemistry, (U.)*  
 40 Heath Street West.
- M ROSCOE REID GRAHAM, M.B.,  
*Demonstrator in Surgery and Clinical Surgery,*  
 112 College Street.
- S WILLIAM HUBERT GREAVES,  
*Special Lecturer in Public Speaking,*  
 Aurora.
- S WALTER SCOTT GUEST, B.A.Sc.,  
*Lecturer in Electrical Engineering,*  
 30 McMaster Avenue.
- M BENJAMIN LESLIE GUYATT, M.B.,  
*Demonstrator in Neurology,*  
 99 Bellevue Avenue.
- M NORMAN BREECHY GWYN, M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 109 Madison Avenue.
- M ALBERT ROBERT HAGERMAN, M.B.,  
*Demonstrator in Neurology,*  
 889 Bathurst Street.
- M CHARLES H. HAIR, M.D., C.M.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
 545 Palmerston Boulevard.
- D HAROLD HANLON HALLORAN, D.D.S.,  
*Demonstrator in Prosthetic Dentistry,*  
 22 College Street.
- M BEVERLEY HANNAH, M.B.,  
 P *Senior Demonstrator in Medicine and Clinical Medicine,  
 and Lecturer in Medicine,*  
 155 Bloor Street East.

- A WILLIAM JOHN KNOX HARKNESS, M.A.,  
*Lecturer in Limnobiology, (U.)*  
32 Sidney Street.
- M CHARLES WILBUR HARRIS, B.A., M.B.,  
*Demonstrator in Bacteriology,*  
1276 King St. West.
- A MISS EVANGELINE HARRIS, B.A., OXON., M.A.,  
*Lecturer in Latin, (C.)*  
94 St. George Street.
- D KENNETH ROBERT HARRIS, D.D.S.,  
*Demonstrator in Clinical Dentistry, (Easter Term)*  
65 Parkdale Road.
- M ROBERT INKERMANN HARRIS, M.C., M.B.,  
*Demonstrator in Surgery and Clinical Surgery,*  
311 Avenue Road.
- M ALFRED PURVIS HART, M.B.,  
*Senior Demonstrator in Pediatrics,*  
1844 Bloor Street West.
- M JOHN HEPBURN, M.B.,  
*Junior Demonstrator in Medicine and Clinical Medicine,*  
136 Tyrrell Avenue.
- A HARRY WARREN HILBORN, M.A.,  
*Lecturer in Italian and Spanish, (U.)*  
22 Carling Avenue.
- M CLARENCE EDGAR HILL, M.B.,  
*Senior Demonstrator in Ophthalmology,*  
68 South Drive.
- SS MISS ANNIE FRANCES HODGKINS,  
*Lecturer in Social Service,*  
73 Grosvenor Street.
- D WENDELL THOMAS HOLMES, D.D.S.,  
*Demonstrator in Dentistry,*  
133 Humberside Avenue.
- D HUGH ALEXANDER HOSKIN, D.D.S.,  
*Associate in Dentistry,*  
South House, University of Toronto.
- D WILSON LA VERNE HUGILI, D.D.S.,  
*Demonstrator in Dentistry,*  
2 College Street.
- M JOHN JOSEPH HURLEY, M.B.,  
*Junior Demonstrator in Anaesthesia,*  
995 Bathurst Street.

- M HENRY SEATON HUTCHISON, M.B.,  
*Associate in Medicine and Special Lecturer in Life Insurance,*  
 30 Walker Avenue.
- D JOSEPH THOMAS IRWIN, D.D.S.,  
*Demonstrator in Clinical Dentistry,*  
 7 Adelaide Street West.
- S KENNETH BELL JACKSON, B.A.Sc.,  
*Lecturer in Engineering Physics and Photography,*  
 365 Hillsdale Avenue East.
- M ROSS ALEXANDER JAMIESON, B.A., M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 155 Bloor Street East.
- M ERNEST CLIFFORD JAMES, M.B.,  
*Demonstrator in Anatomy,*  
 Hospital for Sick Children.
- M ROBERT MERRIDETH JAMES, M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
 143 College Street.
- D FRANK SPURR JARMAN, D.D.S.,  
*Associate in Dental Surgery and Anaesthesia,*  
 11 Oswald Crescent.
- R ANDREW MURRAY JEFFREY, M.B.,  
*Part-time Clinical Associate in the Connaught Laboratories,*  
 107 Carlton Street.
- M EDWARD JEFFREY, M.B.,  
*Junior Demonstrator in Clinical Microscopy and Clinical Medicine,*  
 107 Carlton Street.
- M GEORGE DOUGLAS JEFFS, B.A., M.B.,  
*Demonstrator in Anatomy,*  
 2761 Yonge Street.
- M SAMUEL JOHNSTON, M.A., M.D., C.M.,  
*Lecturer in Anaesthesia,*  
 108 Avenue Road.
- M CHARLES B. KELLY, B.A., M.B.,  
*Demonstrator in Pathology,*  
 57 Humewood Drive.
- D CHARLES ANGUS KENNEDY, D.D.S.,  
*Associate in Orthodontia,*  
 86 Bloor Street West.



- M JAMES ALEXANDER KINNEAR, M.D., C.M.,  
*Associate in Obstetrics,* 267 Russell Hill Road.
- A MRS. MOSSIE MAY KIRKWOOD, M.A., PH.D.,  
*Special Lecturer in English, (C.)* Trinity House.
- D LOUIS F. KRUEGER, D.D.S., IOWA,  
*Associate in Dentistry,* 424 Lake Front.
- S ROBERT EVERETT LAIDLAW, B.A.Sc.,  
*Special Lecturer in Engineering Law,* 9 Toronto Street
- M WALTER WHITNEY LAILEY, B.A., M.B.,  
*Senior Demonstrator in Obstetrics and Gynaecology,* 324 Spadina Road.
- A HENRI LASSERRE, B.ÈS L., B.ÈS SC., L. EN DR., GENEVA,  
*Lecturer in Oral French, (V.)* 259 Roxborough Street East.
- M GEORGE FRANKLIN LAUGHLEN, M.D., C.M.,  
*Demonstrator in Pathology,* 495 Broadview Avenue.
- M ALEXANDER SMITH LAWSON, M.B.,  
*Demonstrator in Anatomy,* 82 College Street.
- M ARTHUR BAKER LE MESURIER, M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,* 59 Spadina Road.
- D CLARENCE FREDERICK LEWIS, D.D.S.,  
*Demonstrator in Clinical Dentistry,* 2 College Street.
- M EDMUND PERCY LEWIS, B.A., MCMASTER, M.B.,  
*Junior Demonstrator in Psychiatry,* 47 Bracmore Gardens.
- A MISS ADELINE LOBB, M.A., TOR., OXON.,  
*Lecturer in English, (C.)* 19 Elgin Avenue.
- M JULIAN DERWENT LOUDON, B.A., M.B.,  
*Associate in Medicine,* 254 Sherbourne Street.
- M GLADSTONE WILFRED LOUGHEED, M.C., M.D.,  
*Senior Demonstrator in Clinical Microscopy and Clinical Medicine,* 728 Dovercourt Road.

- M DONALD MACKINTOSH LOW, M.B.,  
*Junior Demonstrator in Obstetrics and Gynaecology,*  
 96 College Street.
- M MORTIMER LYON, M.D., C.M.,  
*Senior Demonstrator in Ophthalmology,*  
 122 Bloor Street West.
- M HOWARD WILLIAM DAVID MCCART, M.B.,  
*Full-time Demonstrator in Oto-Laryngology,*  
 122 Bloor Street West.
- M JAMES CLARENCE MCCLELLAND, B.A., M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
 151 Bloor Street West.
- M ROBERT JAMES AVERY McCOMB, M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
 40 Gothic Avenue.
- M JOHN WILLIAM SCOTT McCULLOUGH, M.D., C.M., D.P.H.,  
*Special Lecturer in Public Health Administration, School  
 of Hygiene,*  
 Spadina House.
- M JOHN LAING McDONALD, M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
 160 Bloor Street West.
- M JOHN MACKAY MACDONALD, M.D., C.M.,  
*Demonstrator in Histology,*  
 687 Pape Avenue.
- A JOHN LORNE McDUGALL, M.A.,  
*Lecturer in Economics, (U.)*  
 Hart House.
- M JOSEPH ARTHUR MACFARLANE, B.A., SASKATCHEWAN, M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
 96 College Street.
- S WILLIAM GOURLAY McINTOSH, B.A.Sc.,  
*Lecturer in Machine Design,*  
 360 Rosewell Avenue.
- M GEORGE CRERAR McINTYRE, M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
 469 Parliament Street.
- R ALEXANDER LYNN McKAY, B.A., M.B.,  
*Clinical Associate in the Connaught Laboratories,*  
 144 Manor Road East.
- M ANGUS MACKAY, M.B.,  
*Demonstrator in Pathology,*  
 9 Madison Avenue.

- M ALEXANDER JOHN MACKENZIE, B.A., M.B., LL.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 37 Spadina Road.
- M KENNETH GEORGE MCKENZIE, M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
 102 College Street.
- M NEIL MCKINNON, M.B.,  
*Demonstrator in Hygiene, School of Hygiene, and Research Associate in the Connaught Laboratories,*  
 22 St. Mary Street.
- M GORDON McLARTY, D.S.O., M.B.,  
*Junior Demonstrator in Psychiatry,*  
 124 Bloor Street West.
- D NORMAN TEMPEST MACLAURIN, M.B.,  
*Associate in Histology, Bacteriology and Pathology,*  
 717 Spadina Avenue.
- Ms ERNEST MACMILLAN, B.A., Mus D., OXON.  
*Lecturer in Church Music,*  
 47 Castlefield Avenue.
- H MISS EVA MYRTLE McMILLAN, Ph.B., CHICAGO,  
*Lecturer in Household Science,*  
 634 Huron Street.
- SS JOHN WALKER MACMILLAN, B.A., D.D.,  
*Lecturer in Social Service,*  
 190 Dawlish Avenue.
- M JAMES PLAYFAIR McMURRICII, M.A., PH.D., JOHNS HOPKINS,  
 LL.D., MICHIGAN,  
*Special Lecturer in Science and Civilization,*  
 75 Forest Hill Road.
- M ARCHIBALD GEORGE MCPHEDRAN, B.A., M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 923 College Street.
- M JOHN HARRIS MCPHEDRAN, M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 35 Nanton Avenue.
- SS MISS MARY ELMA MCPHEDRAN,  
*Lecturer in Social Service,*  
 45 St. Clair Avenue West.
- M WILLIAM FLETCHER MCPHEDRAN, B.A., M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 15 Bernard Avenue.
- M OLIVER RAYMOND MABEE, PHM.B., M.D., C.M., MCGILL,  
*Demonstrator in Surgery and Clinical Surgery,*  
 419 Bloor Street West.

- D WILLIAM STANLEY MADILL, D.D.S.,  
*Demonstrator in Clinical Dentistry,*  
 2 Bloor Street East.
- M WILLIAM MAGNER, M.D., D.P.H.,  
*Special Lecturer in Pathology,*  
 224 Rose Park Drive.
- M SAMUEL JOHN NEWTON MAGWOOD, M.B.,  
*Junior Demonstrator in Obstetrics and Gynaecology,*  
 414 Dovercourt Road.
- M ARNOLD DENBOW ALFRED MASON, D.D.S.,  
*Special Lecturer in Dentistry,*  
 86 Bloor Street West.
- M DONALD MURRAY MEEKISON, M.B., B.Sc. (Med.),  
*Demonstrator in Anatomy and in Neurology,*  
 Hospital for Sick Children.
- S JOHN WALLER MELSON, B.A.Sc.,  
*Lecturer in Civil Engineering and Geodesy,*  
 69 Walmsley Boulevard.
- D ALEXANDER EUGENE MONTGOMERY, M.B.,  
*Senior Demonstrator in Anatomy,*  
 440 Shaw Street.
- M EDWARD ARCHIBALD MORGAN, M.B.,  
*Senior Demonstrator in Pediatrics,*  
 160 Bloor Street West.
- D GEORGE VICTOR MORTON, D.D.S.,  
*Demonstrator in Dentistry,*  
 2 Bloor Street East.
- MS FERDINAND ALBERT MOURÉ, MUS. DOC.,  
*Lecturer in the History of Music,*  
 490 Huron Street.
- D LAWRENCE MCCHEYNE MURRAY, B.A., M.B.,  
*Demonstrator in Anatomy,*  
 1796 Bloor Street West.
- M LEONARD M. MURRAY, M.D., C.M., MCGILL,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 160 Bloor Street West.
- M WILLIAM T. NOONAN, M.B., L.M., DUBLIN, D.G.O., DUBLIN,  
*Junior Demonstrator in Obstetrics and Gynaecology,*  
 160 Bloor Street West.
- A ARTHUR ANGUS NORTON, B.A., CANTAB.,  
*Lecturer in French, (T.)*  
 369 Indian Grove.

- M WILLIAM EDWARD OGDEN, M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 86 Bloor Street West.
- M FRANCIS JOSEPH O'LEARY, M.B.,  
*Junior Demonstrator in Obstetrics and Gynaecology,*  
 151 Bloor Street West.
- M TREVOR OWEN, M.D.,  
*Junior Demonstrator in Medicine,*  
 8 Cawthra Square.
- M THOMAS JEFFERSON PAGE, M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 941 Bathurst Street.
- M FRANK STEWART PARK, O.B.E., B.A., M.B.,  
*Tenior Demonstrator in Medicine and Clinical Medicine,*  
 2 Glengrove Avenue West.
- M CHARLES BENISTER PARKER, B.A., M.B.,  
*Demonstrator in Surgery and Clinical Surgery,*  
 52 College Street.
- SS MRS. ETHEL DODDS PARKER,  
*Lecturer in Social Service,*  
 29 Dorval Road.
- M WILFRID ROWAN PARKS, M.B.,  
*Junior Demonstrator in Anaesthesia,*  
 27 Manor Road East.
- M HAROLD CAMPBELL PARSONS, M.A., M.D., C.M.,  
*Associate in Medicine,*  
 6 Clarendon Avenue.
- M ROBIN PEARSE, F.R.C.S.,  
*Demonstrator in Surgery and Clinical Surgery,*  
 206 Bloor Street West.
- D CHARLES ERNEST PEARSON, D.D.S.,  
*Demonstrator in Dentistry,*  
 86 Bloor Street West.
- A LESTER BOWLES PEARSON, B.A., TOR., OXON.,  
*Lecturer in History, (U.)*  
 12 Admiral Road.
- E SAMUEL WALTER PERRY, B.A.,  
*Lecturer in Art and Commercial Work,*  
 406 Brunswick Avenue.
- P JOHN THOMAS PHAIR, M.B., D.P.H.,  
*Lecturer in School Hygiene,*  
 99 Rose Park Drive.

- M GEORGE ROWE PHILP, M.B.,  
*Demonstrator in Pathology,*  
 607 Sherbourne Street.
- M GEORGE ROBINSON PIRIE, M.B.,  
*Senior Demonstrator in Pediatrics,*  
 20 Madison Avenue.
- A MICHEL POIRIER, L. ès. L.,  
*Lecturer in French, (C.)*  
 56 St. Albans Street.
- M GEORGE DANA PORTER, M.B.,  
*Lecturer in Hygiene (Part-time)*  
 162 Crescent Road.
- M EDWIN JOHN PRATT, PH.D.,  
*Special Lecturer in English for Medical Students,*  
 25 Tullis Drive.
- M D'ARCY JEROME PRENDERGAST, B.A., M.B.,  
*Junior Demonstrator in Medicine and Clinical Medicine,*  
 124 Bloor Street West.
- M MISS REBECCA MARGARITE PRICE, M.B.,  
*Demonstrator in Bacteriology,*  
 425 Crawford Street.
- A JOCELYN CAMPBELL PATRICK PROBY, M.A., B.LITT., OXON.,  
*Lecturer in History, (U.)*  
 Trinity House.
- M CECIL A. RAE, M.B.,  
*Junior Demonstrator in Oto-Laryngology,*  
 86 Bloor Street West.
- M GORDON EARLE RICHARDS, M.B.,  
*Associate in Radiology,*  
 86 Bloor Street West.
- D SAMUEL MARSH RICHARDSON, D.D.S.,  
*Associate in Dentistry,*  
 189 Wychwood Avenue.
- D MISS WINIFRED CHILDS RIDDLE, B.A.,  
*Associate in Histology, Bacteriology and Pathology,*  
 71 Hewitt Avenue.
- D HENRY GEORGE ROBB, D.D.S.,  
*Associate in Dental Surgery and Anaesthesia,*  
 86 Bloor Street West.
- M DAVID EDWIN ROBERTSON, M.D.,  
*Associate in Surgery and Clinical Surgery,*  
 112 College Street.

- A HARTLEY GRANT ROBERTSON, B.A., PH.D., CHICAGO,  
*Lecturer in Classics, (V.)*  
503 Davenport Road.
- S JAMES MURRAY ROBERTSON, B.A.Sc.,  
*Special Lecturer in Technical English,*  
261 St. Germain Avenue.
- A DAVID ANTON FREDERICK ROBINSON, M.A.,  
*Lecturer in Mathematics, (U.)*  
302 Heath Street East.
- M THOMAS ARNOLD ROBINSON, M.D., C.M., MCGILL,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
147 Howard Park Avenue.
- M WILLIAM LIPSETT ROBINSON, B.A., MCMASTER, M.B.,  
*Temporary Lecturer in Medical Jurisprudence,*  
18 Doncliffe Drive.
- M CHARLES HAROLD ROBSON, M.D., C.M.,  
*Junior Demonstrator in Anaesthesia,*  
26 Foxbar Road.
- A REV. WILLIAM ROLLO, M.A., ABERDEEN,  
*Lecturer in Hebrew, (T)*  
26 Martin Crescent.
- M ALBERT HILL ROLPH, B.A., M.B.,  
*Assistant Demonstrator in Radiology,*  
160 St. George Street.
- M FREDERICK WHITNEY ROLPH, M.A., M.D., C.M.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
13 Madison Avenue.
- D HUGH ALEXANDER ROSS, D.D.S.,  
*Associate in Operative Dentistry,*  
534a St. Clair Avenue West.
- M JAMES WELLS ROSS, M.B., M.S., MINN.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
64 Bloor Street East.
- M MISS MARY ROSS, B.A., DALHOUSIE,  
*Demonstrator in Biometrics and Vital Statistics in the  
School of Hygiene,*  
280 Bloor Street West.
- D COLIN C. ROUS, B.A.Sc.,  
*Lecturer in Applied Chemistry and Metallurgy,*  
227 Cottingham Street.
- A REV. EDWARD LEONARD RUSII, B.A., WESTERN,  
*Lecturer in French, (M.)*  
St. Michael's College.

- M EDWARD STANLEY RYERSON, M.D., C.M.,  
*Associate in Surgery and Clinical Surgery,*  
14 Delisle Avenue.
- E ALLEN NELSON SCARROW,  
*Lecturer in Manual Training,*  
8 Conrad Avenue.
- M WALLACE ARTHUR SCOTT, C.M.G., B.A., M.B., F.R.C.S.,  
*Associate in Surgery and Clinical Surgery,*  
627 Sherbourne Street.
- M WILLIAM ALBERT SCOTT, B.A., M.B.,  
*Associate in Obstetrics and Gynaecology,*  
160 Bloor Street West.
- P WALLACE SECCOMBE, D.D.S.,  
*Special Lecturer in Oral Hygiene,*  
102 Wells Hill Avenue.
- M CHARLES SHEARD, JR., M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
52 College Street.
- D JOHN MACMICHAEL SHELDON, D.D.S.,  
*Demonstrator in Dentistry,*  
2 Bloor Street East.
- M NORMAN STRAHAN SHENSTONE, B.A., M.D., COLUMBIA,  
*Associate in Surgery and Clinical Surgery,*  
196 Bloor Street West.
- D FRANCIS H. SHEPHERD, D.D.S.,  
*Demonstrator in Clinical Dentistry,*  
115 Concord Avenue.
- M HARRY JAMES SHIELDS, B.A., M.B.,  
*Junior Demonstrator in Anaesthesia,*  
102 College Street.
- M EDWARD EARLE SHOULBICE, M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
461 Dovercourt Road.
- M CHARLES BUCKINGHAM SHUTTLEWORTH, M.D., C.M., F.R.C.S.,  
*Associate in Surgery and Clinical Surgery,*  
478 Huron Street.
- M ROY WILFRID SIMPSON, M.B.,  
*Junior Demonstrator in Pediatrics,*  
30 Chester Hill Road.
- M ALAN SKINNER, M.B.  
*Part-time Demonstrator in Anatomy,*  
170 Manor Road East.



- S ERNEST ALBERT SMITH, M.A., McMASTER,  
*Lecturer in Chemical Engineering,*  
113½ Soudan Avenue.
- M GEORGE EDWARD SMITH, B.A., M.B.,  
*Senior Demonstrator in Pediatrics,*  
244 Bloor Street West.
- M FREDERICK JAMES SNELGROVE, B.A., McMASTER, M.B.,  
*Demonstrator in Anatomy and in Histology,*  
1028 Bathurst Street.
- D CHARLES ALVIN SNELL, D.D.S.,  
*Associate in Periodontology,*  
2 Bloor Street East.
- S CHESTER IVOR SOUCY, B.A.Sc.,  
*Lecturer in Electrical Engineering,*  
48 Moore Avenue.
- M WILLMOT EDWARD LENOX SPARKS, M.B.,  
*Demonstrator in Neurology,*  
455 Windermere Avenue.
- SS FRANK NEIL STAPLEFORD, M.A., B.D.,  
*Lecturer in Social Service,*  
543 Windermere Avenue.
- A ARTHUR FRANCIS CHESTLRFIELD STEVENSON, B.A., CANTAB, M.A.,  
*Lecturer in Mathematics, (U.)*  
103 Avenue Road.
- D JOSEPH N. STEWART, D.D.S.,  
*Demonstrator in Dentistry,*  
683 Main Street East, Hamilton.
- A M. ST. JOHN, M.A.,  
*Lecturer in Latin, (M.)*  
St. Joseph's College.
- A REV. BASIL SULLIVAN, M.A.,  
*Lecturer in Social Ethics, (M.)*  
St. Michael's College.
- A JOHN ALVIN SURERUS, B.A.,  
*Lecturer in German, (V.)*  
75 Oriole Gardens.
- D CHARLES EDWARD SUTTON, D.D.S.,  
*Associate in Periodontology,*  
86 Bloor Street West.
- D WILLIAM GEORGE SWITZER, D.D.S.,  
*Associate in Dentistry,*  
258 Westmoreland Avenue.

- M ROY HINDLEY THOMAS, M.C., M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
 167 College Street.
- D ARCHIBALD SPURGEON THOMSON, D.D.S.,  
*Demonstrator in Dentistry,*  
 86 Bloor Street West.
- M FREDERICK FITZGERALD TISDALL, M.D.,  
*Junior Demonstrator in Pediatrics,*  
 102 College Street.
- A WILLIAM BERNARD TOOLE, B.A.,  
*Lecturer in Greek, (M.)*  
 St. Michael's College.
- M EMERSON JAMES TROW, M.B.,  
*Senior Demonstrator in Medicine and Clinical Medicine,*  
 122 Bloor Street West.
- A EDWARD JOHNS URWICK, M.A., OXON.,  
*Special Lecturer in Political Economy, (U.)*  
 482 Huron Street.
- H MISS CHARLOTTE FRANCES VALENTINE, M.A.,  
*Lecturer in Household Science,*  
 7 Queen's Park.
- M JOHN FAIR VAN EVERY, B.A.,  
*Special Lecturer in English Expression,*  
 13 Wells Street.
- M HERMON BROOKFIELD VAN WYCK, B.A., M.B.,  
*Junior Demonstrator in Obstetrics and Gynaecology,*  
 280 Danforth Avenue.
- M FULTON SCHUYLER VROOMAN, M.B.,  
*Junior Demonstrator in Psychiatry,*  
 57 Tyrrell Avenue.
- SS MISS CLARA JEAN WALKER, B.A.,  
*Lecturer in Social Service,*  
 90 Albert Street.
- D ROBERTSON ROY WALKER, D.D.S.,  
*Demonstrator in Dentistry,*  
 2 Bloor Street East.
- M HARDOLPH WASTENEYS, PH.D., COLUMBIA,  
*Special Lecturer in Science and Civilization,*  
 20 Howland Avenue.
- M WILLIAM VIRGIL WATSON, M.B.,  
*Senior Demonstrator in Therapeutics,*  
 86 Bloor Street West.

- SS ROBERT FRANCIS WIDDOWS, B.A.,  
*Lecturer in Social Service,*  
64 Craighurst Avenue.
- MS HEALEY WILLAN, MUS. DOC.,  
*Lecturer in the Theory of Music,*  
139 Inglewood Drive.
- M HERBERT GEORGE WILLSON, B.A., M.D.,  
*Demonstrator in Anatomy, (Part-time)*  
186 Spadina Road.
- M GEORGE EWART WILSON, M.B., F.R.C.S.,  
*Associate in Surgery and Clinical Surgery,*  
206 Bloor Street West.
- A SIR BERTRAM COGHILL ALAN WINDLE, M.A., M.D., Sc.D., DUBLIN,  
PH.D., ROME, M.Sc., LL.D., BIRMINGHAM, ROYAL UNIVERSITY,  
IRELAND, BOSTON, F.R.S.  
*Lecturer in Ethnology, (U.)*  
48 Roselawn Avenue.
- M DAVID EDMUND STAUNTON WISHART, B.A., M.B.,  
*Junior Demonstrator in Oto-Laryngology,*  
47 Grosvenor Street.
- M OSWALD CHARLES JOSEPH WITHROW, M.B.,  
*Demonstrator in Histology,*  
86 Bloor Street West.
- M JAMES HENRY WOOD, D.S.O., M.B.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
On leave of absence.
- A MISS GLADYS INGLESON WOOKEY, M.A.,  
*Lecturer in English, (C.)*  
577 Jarvis Street.
- M HAROLD WILLIAM WOOKEY, M.B., F.R.C.S.,  
*Junior Demonstrator in Surgery and Clinical Surgery,*  
102 College Street.
- D ROBERT SIDNEY WOOLLATT, D.D.S.,  
*Demonstrator in Dentistry,*  
2 Cuthbert Crescent.
- M ARTHUR BALDWIN WRIGHT, M.B.,  
*Demonstrator in Surgery and Clinical Surgery,*  
206 Bloor Street West.
- SS CHARLES MELVILLE WRIGHT, B.A.,  
*Lecturer in Social Service,*  
557 Huron Street.

- A MISS JESSIE GERTRUDE WRIGHT, Ph.D.,  
*Lecturer in Botany, (U.)*  
 On leave of absence.
- M WALTER WALKER WRIGHT, M.B.,  
*Senior Demonstrator in Ophthalmology,*  
 143 College Street.

## OTHER APPOINTMENTS

- R EDWARD BLAKE ALLAN, B.A.Sc., C.E.,  
*Research Assistant in Civil Engineering,*  
 12 Carey Road.
- A MISS ELIZABETH JOSEPHINE ALLIN, B.A.,  
*Assistant Demonstrator in Physics, (U.)*  
 85 St. George Street.
- A FRANCIS MAGOUN ARCHIBALD, B.Sc., ACADIA, MCGILL, M.A., TOR.,  
*Assistant in Electro-Chemistry, (U.)*  
 North House, University of Toronto.
- S CECIL ALEXANDER VINING ARMOUR, B.A.Sc.,  
*Demonstrator in Hydraulics,*  
 11 Spencer Avenue.
- A COLIN BARNES, M.Sc., LEEDS,  
 R *Demonstrator and Research Assistant in Physics, (U.)*  
 30 Willcocks Street.
- A CLAYTON AMOS BAXTER, B.A.,  
*Class Assistant in Philosophy, (U.)*  
 North House, Victoria College.
- A PARKER McEWEN BAYNE, M.A.,  
*Class Assistant in Biology, (U.) (Easter Term)*  
 24 Quebec Avenue.
- D JOHN WILLIAM BEATTY,  
*Instructor in Drawing, Department of Dental Anatomy,*  
 25 Severn Street.
- R JOHN BENJAMIN BECK, B.A.Sc.,  
*Research Assistant in Chemical Engineering,*  
 124 Walmer Road.
- A WRAY M. BELL,  
*Class Assistant in Astronomy, (U.)*  
 Gate House, Victoria College.
- A LOUIS AUGUSTE BIBET,  
*Instructor in French, (C.) and Reader in French, (T.)*  
 31 Charles Street West.

- A MISS DOROTHY BLAKEY, M.A., BRITISH COLUMBIA AND TOR.,  
*Fellow in English, (C.)* 85 St. George Street.
- S LLOYD JUDSON BONHAM, B.A.Sc.,  
*Demonstrator in Chemical Engineering,* 46 Gloucester Street.
- R DONALD JAMES BOWIE, B.Sc., (MED.), M.A.,  
*Research Assistant in Physiology,* University of Toronto.
- R WILLIAM BARTLET BREBNER, M.B.,  
*Fellow in the Banting and Best Medical Research,* 73 Jameson Avenue.
- R MRS. MILDRED DAVIDSON BREBNER,  
*Research Assistant in the Banting Medical Research,* 73 Jameson Avenue.
- A CHARLES CLINTON BROWN, PHM.B., M.B.,  
*Class Assistant in Biology, (U.)* 1978 Dufferin Street.
- A GEORGE FENNELL BROWN,  
*Assistant in Chemistry, (U.)* 17 Biggar Avenue.
- A GEORGE GORDON BROWN, M.A.,  
*Class Assistant in Psychology, (U.)* 54 Howland Avenue.
- S ROY JAMES BROWN, B.A.Sc.,  
R *Demonstrator in Electrical Engineering, and Research Assistant in Electrical Engineering,* 21 Glen Gordon Road.
- S DOUGLAS BRUCE, B.A.Sc.,  
*Demonstrator in Electrical Engineering,* 146 Woodington Avenue.
- S JOHN GOULD CADE, B.A.Sc.,  
*Demonstrator in Machine Design,* 243 Major Street.
- A MISS GRACE ISABELLA CAMERON, B.A., B.Sc., MANITOBA,  
*Assistant in Botany, (U.)* 85 St. George Street.
- M WILLIAM ROBERTSON CAVEN, M.B.,  
*Fellow in Physiology,* 88 Bloor Street East.
- M ISRAEL LYON CHAIKOFF, M.A.,  
*Demonstrator in Physiology,* 200 Carlaw Avenue.

- S FREDERICK COATES,  
*Instructor in Modelling,*  
Scarborough Bluffs.
- A ARTHUR FREDERICK WILL COLE, B.A.,  
*Assistant in Chemistry, (U.)*  
77 Sherwood Avenue.
- A RICHARD FRANCIS VEREDEST COOPER, B.S.A., MCGILL,  
*Assistant in Botany, (U.)*  
28 Cecil Street.
- H MISS MARY COPUS, B.A.,  
*Research Worker in Household Science,*  
432 Markham Street.
- M HUGH SCHOFIELD COULTHARD, B.A., M.B.,  
*Fellow in Physiology,*  
Wycliffe College.
- S WILLIAM RAE COWAN, B.A.Sc.,  
*Demonstrator in Engineering Drawing, (Michaelmas Term)*  
216 Cottingham Street.
- D MICHAEL ARMACOST COX, M.B.,  
M *Fellow in Bio-Chemistry, and Assistant in Bio-Chemistry,*  
34 St. Clair Avenue West.
- R MISS C. HELEN CRAW,  
*Research Assistant in Anatomy,*  
60 Grosvenor Street.
- R MALCOLM FRANKLIN CRAWFORD, B.A., WESTERN,  
*Research Assistant in Physics,*  
65 Sussex Avenue.
- A MISS KATHLEEN MAY CROSSLEY, B.A.,  
*Demonstrator in Physics, (U.)*  
290 Huron Street.
- A JOHN CRYER, M.A.,  
*Assistant in Chemistry, (U.)*  
229 Carlton Street.
- E JAMES BROWN DANDENO, B.A., QUEEN'S, A.M., PH.D., HARVARD,  
*Instructor for Specialists in Agriculture and Supervisor of Practice-teaching,*  
215 St. Clair Avenue West.
- A GRANT DOOKS DARKER, M.A.,  
*Assistant in Botany, (U.)*  
68 Kennedy Avenue.
- M JAMES ARNOLD DAUPHINEE, M.A., BRITISH COLUMBIA, TOR.,  
*Fellow in Bio-Chemistry,*  
300 Huron Street.

- M WILLIAM LORNE DEETON, B.A., M.B.,  
*Fellow in Pathology,*  
 342 Bloor Street West.
- S ANTOINE VALENTINE DELAPORTE, B.A.Sc.,  
*Instructor in Sanitary Chemistry,*  
 5 Millerson Avenue.
- R HAROLD MARSHALL DILWORTH, M.A.Sc., M.A.,  
*Research Assistant in Chemical Engineering,*  
 259 Howland Avenue.
- A HARRY JAMES DOWN,  
*Class Assistant in Astronomy, (U.)*  
 26 Gloucester Street.
- M DAVID CECIL B. DUFF, B.A.,  
*Class Assistant in Hygiene,*  
 85 Woodlawn Avenue West.
- M MISS VIOLET EVELYN DUNBAR, B.A., BRITISH COLUMBIA, M.A.,  
*Fellow in Bio-Chemistry,*  
 50 Elgin Avenue.
- S JOHN PEARSON DUNCAN, B.A.Sc.,  
*Demonstrator in Thermodynamics,*  
 7 Spadina Road.
- M WILLIAM BRODIE EDMONDS, M.B.,  
*Assistant in Bio-Chemistry,*  
 155 Bloor Street East.
- S GORDON ROSS EDWARDS, B.A.Sc.,  
*Demonstrator in Engineering Drawing,*  
 1263 King Street West.
- S WILLIAM FORRESTER ELLIOT, B.A. Sc.,  
*Demonstrator in Electrical Engineering,*  
 133 Walmer Road.
- A FREDERICK JAMES FARNCOMB, M.A.,  
*Assistant in Chemistry, (U.)*  
 799 Carlaw Avenue.
- M RAY FLETCHER FARQUHARSON, M.B.,  
*Fellow in Medicine and Clinical Medicine,*  
 Toronto General Hospital.
- R EDWARD FIDLAR, B.A., M.D.,  
*Research Fellow in Physiology,*  
 310 Huron Street.
- A MRS. LEDA SNIDER FISHER, B.A., M.B.,  
*Class Assistant in Biology, (U.) Easter Term*  
 52 Evelyn Avenue.

- A KARL WILMOT FOLLEY, M.Sc., M.A., SASKATCHEWAN,  
*Fellow in Mathematics, (U.)* 794 Gladstone Avenue.
- A MISS DOROTHY FLORENCE FORWARD, B.A.,  
*Assistant in Botany, (U.)* 100 Charles Street West.
- D MISS MERLE FOSTER,  
*Instructor in Modelling, Department of Dental Anatomy,*  
2 Walton Street.
- A MRS. RUTH MACLACHLAN FRANKS, M.B.,  
*Class Assistant in Biology, (U.)* 57 Charles Street West.
- M MISS CHRISTINA JANE FRASER, M.A.,  
*Class Assistant in Hygiene and Research Assistant in*  
*Connaught Laboratories,* 56 Moore Avenue.
- A MISS MADELEINE ALBERTA FRITZ, B.A., MCGILL, M.A., PH.D., TOR.,  
*Class Assistant in Geology, (U.)* Apt. 3, 2 Spadina Road.
- R MISS SADIE GAIRNS, M.A.,  
*Research Associate in the Banting Medical Research,*  
12 Oriole Gardens.
- R WILLIAM GERRIE, B.A.,  
*Research Assistant in Mineralogy,* 27 Isabella Street.
- A MRS. NELLIE SCHLICHTER GILBERT,  
*Class Assistant in Biology, (U.) Easter Term*  
25 Henning Avenue.
- M ARTHUR MELVILLE GOULDING, B.A., M.D., HARVARD,  
*Assistant in Bio-Chemistry,* Dentonia Park.
- M WILFRID GRAHAM, M.B.,  
*Fellow in Surgery,* Toronto General Hospital.
- A WILLIAM ERNEST GRAHAM, M.A.Sc., BRITISH COLUMBIA, M.A., TOR.,  
*Assistant in Electro-Chemistry, (U.)* 126 Lennox Street.
- M MISS GENEVIEVE B. GRAY,  
*Research Assistant in Bacteriology,* 7 Pine Hill Road.
- A MISS ALICE ELIZABETH GRAYDON, B.A.,  
*Fellow in German, (V.)* 16 Admiral Road.



- A FREDERICK CARLYLE HAMILTON, B.A., M.B.,  
*Instructor in Biology, (U.) Easter Term*  
 234 Heath Street East.
- A KEITH LLOYD HAMILTON,  
*Class Assistant in Biology, (U.) Easter Term*  
 North House, Victoria College.
- A HUBERT ROBIN LAMBERT HART, M.A., McMASTER,  
*Assistant in Chemistry, (U.)*  
 61 Clifton Road.
- M JOSEPH MAURICE HARVEY, B.A.,  
*Part-time Fellow in Physiology,*  
 37 Isabella Street.
- S CECIL GEORGE HEARD, B.A.Sc.,  
*Demonstrator in Thermodynamics,*  
 350 Markham Street.
- R MISS DAISY DENSHAM HEARN,  
*Research Assistant in Psychology,*  
 249 Dovercourt Road.
- R MISS NELLIE RUTH HEARN,  
*Research Assistant in Physiology,*  
 249 Dovercourt Road.
- S GORDON IRVINE HOOVER, M.A., PH.D., CANTAB,  
*Demonstrator in Chemical Engineering,*  
 586 Spadina Avenue.
- F ROBERT CHRISTIE HOSIE, B.Sc.F.,  
*Instructor in Forestry,*  
 287 St. George Street.
- D RICHARD SANDFIELD HOSKING, B.A.,  
*Instructor in Public Speaking,*  
 164 Brookdale Avenue.
- S CHESTER ARTHUR HUGHES, M.M., M.A.Sc.,  
*Instructor in Civil Engineering,*  
 Swansea.
- A HENRY JOHN CUNNINGHAM IRETON, M.A.,  
*Demonstrator and Research Associate in Physics, (U.)*  
 27 Willcocks Street.
- A WILLIAM ARTHUR IRVINE, B.A.Sc.,  
*Assistant in Electro-Chemistry, (U.)*  
 315 Willard Avenue.
- M DUDLEY ARTHUR IRWIN, M.B.,  
*Fellow in Pathology,*  
 321 Brunswick Avenue.

- A WALTER ERASTUS JACKSON, M.A.,  
*Class Assistant in Astronomy, (U.)*  
 195 Cottingham Street.
- S CHARLES WILLIAM JEFFERYS,  
*Instructor in Painting, Department of Architecture,*  
*(Part-time)*  
 York Mills.
- A MISS RUTH INFELD JENKING, B.A.,  
*Fellow in Ancient History, (V.)*  
 84 Queen's Park.
- S PERCY VANDELEUR JERMYN, B.A.Sc.,  
*Instructor in Engineering Drawing,*  
 109 Collier Street.
- R HELGI JOHNSON, B.Sc., MANITOBA,  
*Research Assistant in Palaeontology,*  
 197 Davenport Road.
- M MRS. MARION MAITLAND JOHNSTON, M.A.,  
 R *Demonstrator in Hygiene, and Research Member of the*  
*Connaught Laboratories,*  
 43 Hillsboro Avenue.
- A ISLWYN WYN JONES, B.A., B.Sc., ALBERTA,  
*Class Assistant in Geology, (U.)*  
 76 St. Mary Street.
- M WILLIAM STRATHEARN KEITH, B.A.,  
*Part-time Fellow in Physiology,*  
 3122 Yonge Street.
- R BARNEY KELLAM, B.A.Sc.,  
*Research Assistant in Chemical Engineering,*  
 15 Churchill Avenue.
- S RALPH STRATHEY KERR, M.A.Sc.,  
*Demonstrator in Electrical Engineering,*  
 46 Macpherson Avenue.
- A DOUGLAS KERR-LAWSON, B.A.,  
*Demonstrator in Mineralogy, (U.)*  
 99 Bedford Road.
- A JOHN DAVIDSON KETCHUM, M.A.,  
*Class Assistant in Psychology, (U.)*  
 40 Charles Street East.
- R HENRY PETER KIMBELL, B.A.Sc.,  
*Research Assistant in Metallurgical Engineering,*  
 56 Essex Avenue.

- A OSCAR CARL HILL KITCHING, M.A.,  
*Assistant in Chemistry, (U.) Easter Term*  
 10 Madison Avenue.
- A MAX ULRICH KNECHTEL, B.A., McMASTER, M.A., MCGILL,  
*Class Assistant in Psychology, (U.)*  
 273 Bloor Street West.
- A MISS CYPRA KRIEGER, M.A.,  
*Fellow in Mathematics, (U.)*  
 53 Leonard Avenue.
- A MISS JANET CARLYLE LAING, B.A.,  
*Instructor in History and French, (C.) Part-time,*  
 221A St. Clair Avenue West.
- A REV. EUGENE CARLISLE J. BEL, B.A.,  
*Instructor in English, (M.)*  
 St. Michael's College.
- A MISS CÉCILE MARTHE LE PRÉVOST  
*Class Assistant in French, (C.)*  
 592 Jarvis Street.
- H MISS HARRIET LEWIS, B.S., WISCONSIN,  
*Instructor in Household Science,*  
 142 Yorkville Avenue.
- A MELVIN JAMES LIGGETT, M.A.,  
*Demonstrator in Physics, (U.)*  
 412 Huron Street.
- S HAROLD LANGDON MCCLELLAND, B.A.Sc.,  
*Demonstrator in Mining Engineering, (Michaelmas term)*  
 R *Research Assistant in Mining Engineering, (Easter Term)*  
 38 Kenneth Avenue.
- M JOHN WOODS McCONVILLE, M.B., CH.B., GLASGOW,  
*Fellow in Surgery,*  
 160 Bloor Street West.
- A JOHN THORNTON McCOSH, M.B.,  
*Class Assistant in Biology, (U.)*  
 1978 Dufferin Street.
- A ALBERT ERNEST McCULLOCH, B.A., M.B.,  
*Class Assistant in Biology, (U.) Michaelmas Term*  
 165 St. Clair Avenue West.
- M ALEXANDER EDWARD MACDONALD, M.B.,  
*Assistant in Ophthalmology,*  
 151 Bloor Street West.
- M JAMES ALEXANDER MACDONALD, PHM.B.,  
*Assistant in Pharmacy,*  
 57 Cheriton Avenue.

- A MISS MARY CATHERINE MURIEL McDONALD, B.A.,  
*Assistant Demonstrator in Physics, (U.)*  
 585 Palmerston Avenue.
- M DOUGLAS ARCHIBALD MACFADYEN, B.Sc. (MED.),  
*Fellow in Bio-Chemistry,*  
 515 Brunswick Avenue.
- M MISS JENNIE MCFARLANE, M.A.,  
*Demonstrator in Bio-Chemistry,*  
 Apt. 16, 2 Spadina Road.
- S RONALD J. McGRATH, B.A.Sc.,  
*Demonstrator in Engineering Physics and Photography,*  
 58 Triller Avenue.
- SS MISS AGNES CHRISTINE MCGREGOR,  
*Director of Field Work,*  
 52 St. George Street.
- SS MRS. HAZEL MCGREGOR,  
*Lecturer in Department of Social Service,*  
 27 Hillsboro Avenue.
- R DONALD DOUSE MCKAY, B.A.,  
*Junior Research Assistant in Zymology,*  
 150 Cottingham Street.
- M KENNETH GEORGE MCKENZIE, M.B.,  
*Assistant in Neurology,*  
 102 College Street.
- A GORDON MACKINNEY, B.S.A.,  
*Assistant in Chemistry, (U.)*  
 76 Admiral Road.
- A ALEXANDER BOYD McLAY, B.A., McMASTER, M.A., TOR.,  
*Technical Assistant in Physics, (U.)*
- R  
*Research Assistant in Physics,*  
 108 Heath Street West.
- R JOHN HENRY McLEOD, B.Sc., SASK., M.A., TOR.,  
*Research Assistant in Physics,*  
 663 Bathurst Street.
- S JAMES JOHNSTON MAGILL, B.A.Sc.,  
*Demonstrator in Electrical Engineering,*  
 91 St. George Street.
- R FREDERICK RUSSELL MANUEL, B.A.Sc.,  
*Research Assistant in Chemical Engineering,*  
 264 Gerrard Street East.
- A WILLIAM BARDWELL MATHER, B.A., McMASTER,  
*Assistant in Chemistry, (U.)*  
 49 Queen's Drive, Weston.

- S ALVAN SHERLOCK MATTERS, B.A.Sc.,  
*Special Instructor in Architectural Design,*  
474 Avenue Road.
- S HARRY MILLER, B.A.Sc.,  
*Demonstrator in Engineering Drawing,*  
40 College Street.
- A WILLIAM JAMES PLUMB MILLS, B.A.,  
*Assistant Demonstrator in Physics, (U.)*  
106 Simpson Avenue.
- A MISS JESSIE EVELYN MILLSAP,  
*Class Assistant in Biology, (U.) Michaelmas Term, and*  
*Class Assistant in Botany, (U.)*  
Annesley Hall.
- A WILLIAM SAMUEL MILNE, B.A.,  
*Fellow in English, (C.)*  
73 St. George Street.
- M RICHARD CLINTON MONTGOMERY, M.B.,  
*Assistant in Pathological Chemistry,*  
57 St. Clair Avenue East.
- S DONALD DAVIS MOSSMAN, B.Sc., MCGILL, M.A.,  
*Demonstrator in Chemical Engineering,*  
29 Isabella Street.
- M MISS KATHLEEN MULDOON, PHM.B.,  
*Assistant in Pharmacy,*  
476 Clendenan Avenue.
- A THORNTON MUSTARD, M.A., B.PAED.,  
*Class Assistant in Psychology, (U.)*  
5 Cawthra Square.
- M JOHN RATCLIFFE NADEN, M.B.,  
*Demonstrator in Anatomy,*  
Hospital for Sick Children.
- A ALFRED WALKER HOLLINSHEAD NEEDLER, B.A.,  
*Assistant in Systematic Biology, (U.)*
- M *Demonstrator in Histology and Embryology, (Michaelmas*  
*Term)*  
103 Bedford Road.
- S REGINALD ELEGERTON KIRKWOOD NEELAND, B.A.Sc.,  
*Demonstrator in Engineering Drawing,*  
325 Davenport Road.
- R CHARLES DAVID NIVEN, M.A., B.Sc., ABERDEEN,  
*Research Assistant in Physics,*  
637 Huron Street.

- M JAMES LUNDY CHAPMAN NORNABELL,  
*Assistant in Pharmacy,*  
355 Brunswick Avenue.
- A GORDON PALL, B.A., MANITOBA,  
*Fellow in Mathematics, (U.)*  
423 Euclid Avenue.
- H MISS JEAN PANTON, M.A.,  
*Instructor in Food Chemistry,*  
51 Foxbar Road.
- H MISS EDNA WILHELMINE PARK, M.A.,  
*Instructor in Household Science,*  
25 Grosvenor Street.
- A MRS. ELISA PATTERSON,  
*Assistant in French, (C.)*  
29 Aylmer Avenue.
- A ARTHUR CYRIL PEACHEY,  
*Lecture Assistant in Physics, (U.)*  
East House, University of Toronto.
- A LEWIS LORNE PERKIN, B.A.,  
*Assistant in Chemistry, (U.)*  
128 Withrow Avenue.
- A WILLIAM GRAHAM PLUMMER, M.Sc., LONDON,  
R *Demonstrator and Research Assistant in Physics, (U.)*  
88 Walmer Road.
- A CLARENCE BAKER PRICE,  
*Class Assistant in Botany, (U.)*  
102 Maitland Street.
- A ANDREW LYLE PRITCHARD, B.A.,  
*Demonstrator in Biology, (U.)*  
236 Grace Street.
- A MISS FLORENCE MARY QUINLAN, M.A.,  
*Demonstrator in Physics, (U.)*  
1 DeLisle Avenue.
- M CECIL A. RAE, M.B.,  
*Assistant in Oto-Rhinolaryngology,*  
86 Bloor Street West.
- R DONALD S. RAWSON, B.A.,  
*Research Assistant in Biology,*  
236 Grace Street.
- A MISS ANNIE THERESA REED, B.A.,  
*Class Assistant in Physics, (U.)*  
24 Willcocks Street.

- A MISS BEATRICE M. REID, M.A.,  
*Demonstrator in Physics, (U.)*  
57 Charles Street West.
- R HAROLD COLMAN RICKABY, M.A.,  
*Research Assistant in Mineralogy,*  
Hart House, University of Toronto.
- D EDWARD MORPHY RIGSBY,  
*Instructor in Dental Technology,*  
145 Davisville Avenue.
- M MISS MARGARET G. RIOCH, M.D., B.Sc. (Med.),  
*Fellow in Pathological Chemistry, (Michaelmas Term)*  
85 St. George Street.
- E MISS ALICIA ENID ROBERTSON,  
*Instructor in Household Science,*  
19 Hazelton Avenue.
- R MRS. ELIZABETH CHANT ROBERTSON, B.A., M.B.,  
*Research Assistant in the Connaught Laboratories, (Part-time)*  
503 Davenport Road.
- S ROBERT MORTON ROBERTSON, B.A.Sc.,  
*Demonstrator in Hydraulics,*  
53 Castle Frank Road.
- R JACK RYRIE, B.Arch.,  
*Research Assistant in Architecture,*  
18 Clarendon Avenue.
- S WILLIAM LISTER SAGAR, B.A.Sc.,  
*Instructor in Civil Engineering,*  
306 Jarvis Street.
- R JAMES OWEN GRESLIAM SANDERSON, M.Sc., ALBERTA,  
*Research Assistant in Geology,*  
1115 Bay Street.
- A MISS LAILA CORDELIA SCOTT, M.A.,  
*Reader in French, (T.)*  
13 Admiral Road.
- A EDGAR LLOYD SEXSMITH, M.B.,  
*Class Assistant in Biology, (U)*  
33 Sheldrake Boulevard.
- H MISS EVELYN B. SHAW, B.A.,  
*Assistant in Food Chemistry,*  
170 Spadina Road.
- S JOSEPH ERIC BENJAMIN SHORTT, B.A.Sc.,  
*Instructor in Mechanical Engineering,*  
401 Quebec Avenue.

- M LESLIE NELLES SILVERTHORNE, M.B.,  
*Fellow in Pathological Chemistry,*  
 32 Gloucester Street.
- R MISS WINIFRED SIMPSON, B.A.,  
*Research Assistant in Pathology,*  
 Thornhill.
- A HAMILTON DES BARRES SIMS, M.A.,  
*Assistant in Chemistry, (U.)*  
 93 St. George Street.
- H MISS ALICE K. SKINNER, B.A.,  
*Assistant in Food Chemistry,*  
 104 Charles Street West.
- S GEORGE WALLACE SMART, B.A.Sc.,  
*Demonstrator in Electrical Engineering,*  
 71 Howland Avenue.
- A HUBERT CALDWELL SMITH,  
*Assistant in Chemistry, (U.)*  
 274 Armadale Avenue.
- A HUGH GRAYSON SMITH, M.A., Ph.D.,  
*Demonstrator and Research Associate in Physics, (U.)*  
 480 Huron Street.
- R JOHN BEATTIE SMITH, B.S.A.,  
*Research Assistant in Biology,*  
 61 Madison Avenue.
- A LESLIE ARLINGTON SMITH, B.A.,  
*Class Assistant in Biology, (U.)*  
 Demonstrator in Histology and Embryology, (*Michaelmas Term*)  
 316 Huron Street.
- R VICTOR GEORGE SMITH, B.A.Sc.,  
*Research Assistant in Electrical Engineering,*  
 75 Fulton Avenue.
- R SAMUEL SOSKIN, M.B.,  
*Research Assistant in Medicine.*  
 Fellow and Research Assistant in Physiology,  
 132 Nassau Street.
- M MUNROE IRVING SPARKS, B.A., M.B.,  
*Fellow in Pharmacology,*  
 472 West Marion Street.
- A ELGIN MILTON SPARLING, M.A.,  
*Assistant in Chemistry, (U.)*  
 73 Fermanagh Avenue.



- S JOHN JAMES SPENCE,  
*Demonstrator in Engineering Drawing,*  
63 Stibbard Avenue.
- A MISS MARION SQUAIR, M.A.,  
*Substitute Instructor in Italian and Spanish, (U.) Easter Term*  
368 Palmerston Boulevard.
- A MISS HELEN STANTIAL, S.B. SIMMONS, M.A.,  
*Assistant in Chemistry, (U.)*  
R *Research Assistant in Chemistry,*  
85 St. George Street.
- A WILLIAM ELGIN STEENBURGH, B.A., GREENVILLE,  
*Assistant in Systematic Biology, (U.)*  
39 Albermarle Avenue.
- R ROBERT BOYD STEWART, M.A., B.A.Sc., M.D., JOHNS HOPKINS,  
*Research Assistant in Medicine and Clinical Medicine,*  
175 McCaul Street.
- A NORMAN SIDNEY TAYLOR, B.Sc., M.Sc., BIRMINGHAM,  
*Demonstrator in Physics, (U.)*  
633½ Spadina Avenue.
- M LUKE TESKEY, M.B.,  
*Demonstrator in Anatomy,*  
168 Oakwood Avenue.
- A ALFRED EDWIN TILBY,  
*Instructor in French, (C.)*  
79 Madison Avenue.
- R MISS MARY ISABEL TOM, B.A., M.B.,  
*Research Assistant in Anatomy,*  
50 Elgin Avenue.
- S ALVIN SCOTCHMER TOWNSHEND, B.Sc., M.Sc., QUEEN'S, M.A.,  
*Demonstrator in Chemical Engineering,*  
225 Robert Street.
- D MISS EDITH FRANCES TRENT, B.A.,  
*Research Assistant in Preventive Dentistry,*  
78 Warren Road.
- M RICHARD WILLIAM IAN URQUHART, M.A., M.B.,  
*Assistant in Pathological Chemistry,*  
21 Glebe Road East.
- A JOHN LLOYD VAN CAMP, B.Sc.F.,  
*Assistant in Botany, (U.)*  
109 Langley Avenue.
- M THOMAS BAY VERNER, M.B.,  
*Fellow in Bacteriology,*  
142 St. George Street.

- A MISS MARY EVELYN GERTRUDE WADDELL, M.A.,  
*Instructor in Mathematics, (U.)*  
 72 Madison Avenue.
- S ARTHUR WARDELL, B.A.Sc.,  
*Demonstrator in Engineering Drawing,*  
 122 Melrose Avenue.
- M MELVILLE CLARENCE WATSON, M.B.,  
*Demonstrator in Anatomy,*  
 301 Broadview Avenue.
- M JOHN JOSEPH WEBER, B.A.,  
*Fellow in Physiology,*  
 13 Fenning Street.
- S BEVERLEY E. WEIR, B.Sc., QUEEN'S,  
*Demonstrator in Mining Engineering, (Michaelmas Term)*  
 66 Sussex Avenue.
- A MARS McCLELLAND WESTINGTON, M.A.,  
*Instructor in Latin, (V.)*  
 Gate House, Victoria College.
- A MISS MARJORIE ESTELLE WESTMAN, B.A.,  
*Assistant Demonstrator in Physics, (U.)*  
 48 Alexandra Boulevard.
- R ALBERT WILLARD McCOLLUM WHITE, M.B.,  
*Fellow in the Banting and Best Medical Research,*  
 Weston.
- S DUNCAN DAVID WHITSON, B.A.Sc.,  
*Demonstrator in Engineering Drawing,*  
 617 Huron Street.
- A MISS FRANCES H. WIANCKO, M.A.,  
*Assistant in Mathematics, (U.)*  
 28 Anderson Avenue.
- A ROBERT SWITHIN WILLISON, M.A., McMASTER,  
*Assistant in Botany, (U.)*  
 273 Bloor Street West.
- S ALEXANDER CURRIE WILSON, B.A.Sc.,  
*Instructor in Engineering Drawing,*  
 283 Evelyn Avenue.
- M MALCOLM JAMES WILSON, M.A., M.B.,  
*Research Fellow in Medicine and Clinical Medicine,*  
 191 Spadina Road.
- A FRED VICTOR WINNETT, M.A.,  
*Fellow in Oriental Languages, (C.)*  
 Knox College.

- S MAUNSELL HARDING WOLSEY, B.A.Sc.,  
*Demonstrator in Electrical Engineering,*  
 25 Lowther Avenue.
- R ARTHUR MARSHALL WYNNE, M.A., QUEEN'S, PH.D.,  
*Senior Research Assistant in Zymology,*  
 27 Lytton Boulevard.
- R HUGH S. WYNNE-EDWARDS,  
*Research Assistant in Physics,*  
 North House, University of Toronto.
- S FRANK BUTLER YEATS, B.A.Sc.,  
*Demonstrator in Electrical Engineering,*  
 East House, University of Toronto.

ONTARIO COLLEGE OF EDUCATION

- JOHN GEORGE ALTHOUSE, M.A.,  
 326 Durie Street.
- GEORGE ALTON CLINE, D.S.O., M.A.,  
 Hart House, University of Toronto.
- ERNEST LE ROY DANIEL, B.A.,  
 64 Baby Point Crescent.
- HORACE ALEXANDER GRAINGER, B.A., B.PAED.,  
 25 Westmount Avenue.
- JOSEPH A. IRWIN, B.A.,  
 60 Grace Street.
- WILLIAM JAMES LOUGHEED, M.A., B.PAED.,  
 286 Runnymede Road.
- JOHN HUDSON MILLS, M.A., QUEEN'S,  
 97 Tyndall Avenue.
- NORMAN LESLIE MURCH, B.A.,  
 178 Alexandra Boulevard.
- CHARLES EDWARD PHILLIPS, B.A., B.PAED.,  
 6 Burnside Avenue.
- THOMAS M. PORTER, LL.D.,  
 64 Winchester Street.
- WALTER LAWRENCE CHRISTIE RICHARDSON, B.A.,  
 83 Pine Crest Road.
- JOHN FAIR VAN EVERY, B.A.,  
 13 Wells Street.
- WALTER HERBERT WILLIAMS, M.A., QUEEN'S, B.PAED.,  
 198 Glenholme Avenue.
- JAMES GEORGE WORKMAN, B.A.,  
 Scarboro Bluffs.

CONSTITUTION AND ADMINISTRATION OF THE  
UNIVERSITY

The constitution, powers and functions of the University are defined in "The University Act, 1906." (R.S.O., 1914, Chap. 279.)

The management of the property, finances and academic business of the University is entrusted to the Board of Governors, the Senate, Convocation, the Faculty Councils, the Council of University College and the Caput. The functions of these various bodies are exercised subject to supervision and control by the Crown, as hereafter explained.

1. **THE CROWN.**—The Lieutenant-Governor-in-Council has the power to appoint and to remove the Board of Governors (with the exception of the Chancellor and the President); to appoint and remove the Chairman of the Board; his assent is necessary before the Board can make any expenditure which impairs the endowment of the University or College; through the Provincial Auditor or someone else appointed by himself, he audits the accounts of the Board and he requires of them an Annual Report for submission to the Legislature.

2. **THE BOARD OF GOVERNORS.**—The Board of Governors consists of: The Chancellor and the President, *ex-officio*, and twenty-two persons appointed by the Lieutenant-Governor-in-Council, one of whom is named as Chairman of the Board. The appointed members, eight of whom may be nominated by the Alumni Federation of the University, hold office for six years, and one-third of the number retires every two years, but these members are eligible for re-appointment. The Board has power to appoint the President of the University; and to appoint or remove all of the teaching staff of the University or University College upon the nomination or recommendation of the President. The government, conduct, management and control of the University and University College and of the property, revenues, business and affairs thereof are vested in the Board (University Act, 1906, Section 37), but all expenditures of endowment must be authorised by the Lieutenant-Governor-in-Council. The Board makes by-laws, rules and regulations regarding the investment of the funds; the selling and leasing of University properties; the letting of contracts; the appointment and removal of all officers, clerks, assistants and servants of the University; the rate of salaries to be paid to the staff and officers; the fees to be paid by students; the annual appropriations and the transaction of other business.

3. **THE SENATE.**—The Senate consists of four classes of members: (1) Ex-officio members; (2) Faculty members; (3) Appointed members; and (4) Elected members. The ex-officio members are the Chancellor, the Chairman of the Board of Governors, the President of the University, the Principal of University College, the President or other head of each federated university or college, the Deans of the Faculties of Arts, Medicine, Applied Science and Engineering, Household Science, Education, Forestry,

Music and Dentistry and of the School of Graduate Studies, all past Chancellors, Vice-Chancellors and Presidents. Representation of the faculties is made up as follows: the professors, not including the associate or assistant professors, of the Faculty of Arts of the University; five members of the Faculty of Medicine; five members of the Faculty of Applied Science and Engineering; two members of each of the Faculties of Household Science and Education; four members of the Faculty of Dentistry; three members of each of the four Arts colleges, University College, Victoria College, Trinity College and St. Michael's College. The appointed members consist of one representative appointed by each federated university and two by each federated college except St. Michael's, which appoints only one; one by each of the Law Society of Upper Canada and the Ontario Medical Council; and one by each affiliated institution, subject, however, to certain restrictions. The elected members number forty-seven, made up of twelve members representing the graduates in Arts who at graduation were enrolled in University College; five members each representing similar graduates in Victoria College and Trinity College, and four members representing similar graduates in St. Michael's College; five representing the graduates in Medicine; four representing the graduates in Applied Science and Engineering; one representing the graduates in Forestry, one the graduates in Music and one the graduates in the School of Graduate Studies; three representing the graduates in Dentistry; two representing the graduates in Law and two the graduates in Agriculture; four representing the principals of collegiate institutes or high schools or assistants therein who are actually engaged in teaching in such institute or school, and one representing the principals of vocational schools or assistants therein who are actually engaged in teaching in a day vocational school. The graduates in Medicine and Law of Victoria University and the University of Trinity College vote with the graduates of the University of Toronto in these same faculties.

The body thus composed is renewed once in four years, when all except the ex-officio members and the representatives of the Faculty of Arts of the University must retire, but are eligible for reappointment or re-election. The Chairman of the Senate is the President.

The Senate has the power to fill any vacancy which may occur among the elected members of the Senate and to return a final decision in any dispute which may arise in connection with the Senate elections. Among the powers and duties of the Senate are the following: To provide for the regulation and conduct of its proceedings; for the granting of degrees, including honorary degrees, and certificates of proficiency, except in Theology; for the establishment of exhibitions, scholarships and prizes; for the affiliation of any college established in Canada; for the dissolution or modification of the terms of affiliations; for the cancellation, recall and suspension of degrees; for the establishment of any faculty, department, chair or course of instruction in the University, or any department, chair or course of instruction in University College, except Theology; for the conduct of the

election of members of the Senate; for the appointment of examiners and the conduct of all University examinations other than those in the faculties; for the representation on the Senate of any faculty which may hereafter be established; for the preparation and publication of the calendars; to consider and determine on the report of the faculties, the courses of study in these faculties; and all other courses of study for which no faculty is created; to consider and determine on the report of the various faculty councils, the appointment of examiners and the conduct and results of the examinations in these faculties; to consider such matters as may be reported to it by the council of any faculty and to communicate its opinion or action thereon to the council; to hear and determine appeals from decisions of the faculty councils upon applications and memorials by students and others; to make rules and regulations for the management and conduct of the Library and to prescribe the duties of the Librarian; to make such changes in its own composition as may be deemed expedient; and to make such recommendations to the Board as may be deemed proper for promoting the interests of the University and of University College or for carrying out the objects and provisions of the Act.

4. CONVOCATION.—Convocation consists of the whole body of graduates of the University, in all faculties. Except indirectly through its elected representatives, no part of the management of the University is exercised by it as a whole. It elects the Chancellor, and, in divisions according to faculty, it elects members of Senate, as its representatives in Arts, Medicine, Applied Science and Engineering, Forestry, Music, Graduate Studies, Dentistry, Law and Agriculture. Any question relating to University affairs may be discussed by it, and a vote taken. The result of such discussion is communicated to the Senate, which must consider the representation made, and return to Convocation its conclusion thereon.

5. FACULTY COUNCILS.—The nine faculties of Arts, Medicine, Applied Science and Engineering, Household Science, Education, Forestry, Music and Dentistry and the School of Graduate Studies, have each a Council, the President being Chairman, ex-officio, of the first and fourth and the Deans of the respective faculties of the other seven. All professors, associate professors and assistant professors holding appointments in any faculty have a seat and vote upon the council of that faculty, and the Board, upon the recommendation of the President, may appoint to each Faculty Council certain members of other councils; lecturers also, provided they are upon the permanent staff, have a seat but no vote in the council. Each council is autonomous, and has the settlement in the first instance of all applications and memorials from its students, the drawing up of a curriculum of studies, and the appointment of examiners and conduct of examinations. In the case of applications and memorials the settlement by the council is subject to an appeal to the Senate; in the case of courses of studies, appointment of examiners and conduct of examinations, the decisions of the councils are subject to the approval of and confirmation by the Senate.

The Council of the Faculty of Arts includes the Principal of University College, the President or other head of every federated university, the Dean of the Faculty of Arts, the teaching staff of University, Victoria, Trinity and St. Michael's College (except in the case of those whose appointments are temporary), and one professor in the Department of Religious Knowledge appointed by each federated university or college.

The council of any faculty which has assigned for its separate use any building and grounds, has disciplinary jurisdiction in all matters connected with such building or grounds.

6. **THE CAPUT.**—The Caput is a committee composed of the President, the Principal of University College, the Heads of the federated universities, the Heads of the federated colleges, and the Deans of the faculties of the University.

It has power to authorize teaching and lectures by others than the duly appointed members of the teaching staff, to exercise discipline over students, where more than one college or one faculty is concerned, or where breaches of discipline occur outside the buildings or grounds appropriated to each of the several colleges and faculties.

The Students' Administrative Council has been entrusted by the Caput with supervision of the conduct of the students, and subject to the approval of the Caput, has power, through the Students' Court or otherwise, to deal with violations of the regulations governing conduct.

7. **THE COUNCIL OF UNIVERSITY COLLEGE.**—This body is composed of the Principal and the professors, associate professors and assistant professors of the College. It has committed to it the direction and management of the College with full authority over and entire responsibility for the discipline (including the imposition of reasonable fines) of the undergraduates in relation to the lectures and other instruction of the professors, lecturers and other teachers of the College; and no lecturing or teaching of any kind may be carried on in the College by any other than the duly appointed professors or teachers without the authority of the Council.

8. **FEDERATED INSTITUTIONS.**—The following institutions are federated with the University, viz., Victoria College, Trinity College, St. Michael's College, Knox College and Wycliffe College. All regular students matriculated in the University who are enrolled in University College or Victoria College or Trinity College or St. Michael's College and who enter their names with the Registrar of the University are entitled to free instruction in Arts in the University. But this provision does not include exemption from laboratory fees, nor does it apply to graduate instruction.

9. **REVENUES OF THE UNIVERSITY.**—In addition to the income from the balance of the original endowment and additions made to it from time to time, the Legislature grants to the University, annually, the sum of \$507,000 from the revenues of the Province. In addition, the annual deficit upon maintenance account is borne by the Province.





---

MATRICULATION

---

## MATRICULATION

### SUBJECTS

A candidate for Pass Matriculation must write upon the examinations conducted by the Department of Education of Ontario in the following subjects of the Middle School:

LATIN (Authors, one paper; Composition, one paper)

ENGLISH (Literature, one paper; Composition, one paper)

HISTORY (British, one paper; \*Ancient, one paper)

MATHEMATICS (Algebra, one paper; Geometry, one paper)

Any two of:

GREEK (Authors, one paper; Accidence, one paper)

FRENCH (Authors, one paper; Composition, one paper)

GERMAN (Authors, one paper; Composition, one paper)

SPANISH (Authors, one paper; Composition, one paper) *or*

ITALIAN (Authors, one paper; Composition, one paper)

EXPERIMENTAL SCIENCE (Physics, one paper; Chemistry, one paper) *or*

AGRICULTURE (Part I, one paper; Part II, one paper)

In certain cases foreign students may present themselves for examination in their language instead of Greek or French or German or Spanish or Italian when the language and the curriculum in that language have been approved by the Senate. The examination in an approved language consists of two papers, similar in character to those in English.

A candidate for Honour Matriculation must write upon the examinations conducted by the Department of Education of Ontario in one or more of the following subjects of the Upper School:

GREEK (Authors, one paper; Composition, one paper)

LATIN (Authors, one paper; Composition, one paper)

ENGLISH (Literature, one paper; Composition, one paper)

FRENCH (Authors, one paper; Composition, one paper)

GERMAN (Authors, one paper; Composition, one paper)

SPANISH (Authors, one paper; Composition, one paper) *or*

ITALIAN (Authors, one paper; Composition, one paper)

HISTORY (one paper)

MATHEMATICS (Algebra, one paper; Geometry, one paper; Trigonometry, one paper; †Problems, one paper)

PHYSICS (one paper).

ZOOLOGY (one paper).

BOTANY (one paper).

CHEMISTRY (one paper).

\*MUSIC (Theory, one paper; practical examination) will be accepted as an option for Ancient History.

†For certain Scholarship candidates only; see pages 108 and 111.

These examinations, for both Pass and Honour Matriculation, are conducted by the Department at various centres throughout the Province of Ontario in June of each year.

### STANDARDS

A candidate for Pass Matriculation will be allowed to write on one or more papers at a time in any order, and on obtaining at least fifty per cent. of the marks assigned to any paper will be given credit for having passed in such paper and will receive a certificate of such standing.

A candidate for Honour Matriculation will be allowed to write on one or more papers at a time in any order.

In order to secure First Class Honours in a subject a candidate must obtain at one examination at least seventy-five per cent. of the marks assigned to that subject and at least fifty per cent. in each paper of that subject.

In order to secure Second Class Honours in a subject a candidate must obtain at one examination at least sixty-six per cent. of the marks assigned to that subject and at least fifty per cent. in each paper of that subject.

In order to secure Third Class Honours in a subject a candidate must obtain at one examination at least sixty per cent. of the marks assigned to that subject and at least fifty per cent. in each paper of that subject.

A candidate who fails to obtain First, Second or Third Class Honours in a subject under the above regulations, may secure credit for the subject by obtaining at least fifty per cent. on each paper of the subject, not necessarily at one examination.

Such credit in a subject will be accepted by the University as covering the Honour Matriculation requirement with respect to that subject for admission to any faculty.

Such credit in a subject will also be accepted by the University as entitling the candidate, if registered in the Faculty of Arts, to exemption from the Pass work of the First Year in that subject, wherever the subject is included in the First Year of the Pass Course, but such exemption cannot be claimed in more than two subjects by a student registering in the First Year of the Pass Course.

### FACULTY OF ARTS

A candidate for admission to the First Year in the Faculty of Arts must produce satisfactory certificates of good character and of having completed the sixteenth year of his age on or before the first of October of the year in which he proposes to register.

Each candidate for admission to the Faculty of Arts must submit his application for admission in duplicate together with his certificates, to the Registrar of the University, not later than September 10th.

## ADMISSION TO THE PASS COURSE

A candidate for admission to the First Year of the Pass Course must present certificates covering *complete* Pass Matriculation.

A candidate for admission who presents, in addition to complete Pass Matriculation, certificates giving him credit at the Honour Matriculation examination in at least five of the six subjects set forth in the schedule below, may be admitted to the Second Year of the Pass Course; a candidate who lacks credit for one of the six subjects will be required to pass the First Year or equivalent examination in that subject before he will be allowed to register in the Third Year. A candidate who has not complete Pass Matriculation may be admitted to the Second Year of the Pass Course if he presents certificates giving him credit at the Honour Matriculation examination in all six subjects. The prescribed fee for such admission to the Second Year is fifteen dollars. The subjects of Honour Matriculation which will be accepted as equivalent to the work of the First Year are as follows:

1. English
2. Latin
3. Algebra and Geometry
4. One of Greek, German, French, Italian, Spanish
5. History or Trigonometry
6. One of a second language from 4, Physics, Zoology, Botany, Chemistry.

## ADMISSION TO AN HONOUR COURSE

A candidate for admission to the First Year of an Honour Course must present, in addition to complete Pass Matriculation, certificates giving him credit at Honour Matriculation in the five subjects prescribed below for the Honour Course which he wishes to enter.

NOTE: The term "additional subject" includes any one of English, History, Greek, French, German, Italian, Spanish, Trigonometry, Physics, Zoology, Botany, Chemistry.

CLASSICS:—Greek; Latin; Mathematics (Algebra and Geometry); together with two additional subjects, one of which should be French or German.

FRENCH GREEK AND LATIN:—Latin; Mathematics (Algebra and Geometry); two of Greek, English, French; together with an additional subject.

MODERN LANGUAGES:—Latin; Mathematics (Algebra and Geometry); two of German, French, Italian, Spanish; together with an additional subject.

ENGLISH AND HISTORY:—Latin; Mathematics (Algebra and Geometry); two of Greek, English, French, German; together with an additional subject.

- \*MODERN HISTORY { Latin; Mathematics (Algebra and Geometry);  
History; French or German; together with an  
additional subject.
- \*POLITICAL SCIENCE {
- \*PHILOSOPHY:—Latin; English; Mathematics (Algebra and Geometry);  
one of History, Greek, French, German, Physics; together with an  
additional subject.
- PHILOSOPHY (ENGLISH OR HISTORY OPTION):—Latin; Mathematics  
(Algebra and Geometry); one of History, English, Physics; one of  
Greek, French, German; together with an additional subject.
- †PSYCHOLOGY:—Latin; Mathematics (Algebra and Geometry, Trigo-  
nometry); French or German; and one of Physics, Zoology, Botany,  
Chemistry.
- †MATHEMATICS: { Latin; Mathematics (Algebra and Geo-  
metry, Trigonometry); Physics; and  
French or German.
- †MATHEMATICS AND PHYSICS: {
- †PHYSICS AND CHEMISTRY: { Latin; Mathematics (Algebra and Geometry,  
Trigonometry); Physics or Chemistry; and  
French or German.
- †PHYSICS:
- †BIOLOGY:
- †PHYSIOLOGY AND BIOCHEMISTRY:
- †BIOLOGICAL AND MEDICAL SCIENCES:
- †CHEMISTRY:
- †CHEMISTRY MINERALOGY AND GEOLOGY:
- †GEOLOGY AND MINERALOGY:
- †SCIENCE (GENERAL):
- †HOUSEHOLD SCIENCE:
- HOUSEHOLD ECONOMICS:—Latin; Mathematics (Algebra and Geometry);  
two of English, French or German, Physics, Zoology, Botany, Chemistry;  
together with an additional subject; the candidate is recommended to  
take French or German and a science.

#### ADMISSION TO COMMERCE AND FINANCE

A candidate for admission to the First Year of the Course in Commerce and Finance must present certificates giving him credit in the following subjects of Pass and Honour Matriculation:

\*A student may qualify for admission to the Second Year of this course at the Honour Matriculation examination, by obtaining complete standing in the First Year of the Pass Course with an average of sixty-six per cent. in at least four subjects; for Philosophy sixty per cent. is required instead of sixty-six.

†Scientific German and Scientific French are prescribed as compulsory subjects of the First Year of this course.

## PASS MATRICULATION

ENGLISH (Literature and Composition)

HISTORY (British and Ancient) *or*

BRITISH HISTORY and MUSIC

MATHEMATICS (Algebra and Geometry)

Three of:

GREEK (Authors and Accidence)

LATIN (Authors and Composition)

FRENCH (Authors and Composition)

GERMAN (Authors and Composition)

SPANISH (Authors and Composition) *or*

ITALIAN (Authors and Composition)

EXPERIMENTAL SCIENCE (Physics and Chemistry) *or*

AGRICULTURE (Parts I and II)

## HONOUR MATRICULATION

ENGLISH (Literature and Composition)

MATHEMATICS (Algebra, Geometry and Trigonometry)

Two of:

LATIN (Authors and Composition)

GERMAN (Authors and Composition)

FRENCH (Authors and Composition)

SPANISH (Authors and Composition) *or*

ITALIAN (Authors and Composition)

PHYSICS *or*

ZOOLOGY *or*

BOTANY *or*

CHEMISTRY.

A student who submits a Part I Commercial Specialist's Certificate may substitute the same for Ancient History and a language of Pass Matriculation and for the Geometry and Trigonometry of Honour Matriculation.

## FACULTY OF MEDICINE

A candidate for admission to the First Year in the Faculty of Medicine must produce satisfactory certificates of good character and of having completed the seventeenth year of his age on or before the first of October of the year in which he proposes to register; only under exceptional circumstances will a candidate of thirty years or more be admitted.

He must also submit his application for admission in duplicate to the Registrar of the University **not later than September 1st**, together with certificates giving him *full* credit in the following subjects of Pass and Honour Matriculation:

PASS MATRICULATION

LATIN (Authors and Composition)  
 ENGLISH (Literature and Composition)  
 HISTORY (British and Ancient) *or*  
 BRITISH HISTORY and MUSIC  
 MATHEMATICS (Algebra and Geometry)  
 EXPERIMENTAL SCIENCE (Physics and Chemistry) *or*  
 AGRICULTURE (Parts I and II)

Any one of:

GREEK (Authors and Accidence)  
 FRENCH (Authors and Composition)  
 GERMAN (Authors and Composition)  
 SPANISH (Authors and Composition)  
 ITALIAN (Authors and Composition)

HONOUR MATRICULATION

ENGLISH (Literature and Composition)  
 MATHEMATICS (Algebra, Geometry and Trigonometry)  
 One of:

LATIN (Authors and Composition)  
 GREEK (Authors and Composition)  
 FRENCH (Authors and Composition)  
 GERMAN (Authors and Composition).

NOTE: Physics or Botany or Zoology or Chemistry of Honour Matriculation may be substituted for Trigonometry.

A student who has fully completed the First Year in the Faculty of Arts of the University of Toronto, will be admitted to the First Year in the Faculty of Medicine, provided he has at least Pass Matriculation standing in Experimental Science.

A candidate for admission from the British Isles must present a certificate of registration as a medical student with the General Medical Council of Great Britain.

FACULTY OF APPLIED SCIENCE AND ENGINEERING

A candidate for admission to the First Year in the Faculty of Applied Science and Engineering must produce satisfactory certificates of good character and of having completed the seventeenth year of his age on or before the first of October of the year in which he proposes to register.

He must also submit his application for admission in duplicate to the Registrar of the University as early as possible, together with certificates giving him credit in the following subjects of Pass and Honour Matriculation:

## PASS MATRICULATION

ENGLISH (Literature and Composition)

HISTORY (British and Ancient) *or*

BRITISH HISTORY and MUSIC

MATHEMATICS (Algebra and Geometry)

Any three of:

LATIN (Authors and Composition)

GREEK (Authors and Accidence)

FRENCH (Authors and Composition)

GERMAN (Authors and Composition)

SPANISH (Authors and Composition) *or*

ITALIAN (Authors and Composition)

EXPERIMENTAL SCIENCE (Physics and Chemistry) *or*

AGRICULTURE (Parts I and II)

†ARITHMETIC and Certificates in MECHANICAL DRAWING and SHOP WORK from the Principal of the School, accompanied by an approving certificate from the Director of the Technical School Branch of the Department of Education for Ontario.

## HONOUR MATRICULATION

ENGLISH (Literature and Composition)

MATHEMATICS (Algebra, Geometry and Trigonometry)

One of:

LATIN (Authors and Composition)

GREEK (Authors and Composition)

FRENCH (Authors and Composition)

GERMAN (Authors and Composition)

SPANISH (Authors and Composition) *or*

ITALIAN (Authors and Composition).

In selecting the options it is recommended that students take French, German and Experimental Science. In the Department of Architecture, French is recommended; in the Departments of Chemical Engineering and Mechanical Engineering it is desirable that students take German; in the Department of Metallurgical Engineering, Spanish and Experimental Science are recommended.

A candidate for admission from the British Isles must present a certificate showing that he has passed or has exemption from the Preliminary Examination of the Institution of Civil Engineers.

†This option applies to students—and to such students only—who have been in attendance at and matriculate from a Technical School in the Province of Ontario and certified as such by the Department of Education of the Province.



## FACULTY OF HOUSEHOLD SCIENCE

A candidate for admission to the First Year in the Faculty of Household Science must produce satisfactory certificates of good character and of having completed the sixteenth year of her age on or before the first of October of the year in which she proposes to register.

She must also submit her application for admission in duplicate to the Registrar of the University as early as possible, together with certificates giving her credit for the subjects of Matriculation prescribed for admission to the course she desires to enter.

## ADMISSION TO THE PASS COURSE

A candidate for admission to the First Year of the Pass Course must present certificates giving her credit in the following subjects of Pass Matriculation:

ENGLISH (Literature and Composition)  
HISTORY (British and Ancient) *or*  
BRITISH HISTORY and MUSIC  
MATHEMATICS (Algebra and Geometry)  
EXPERIMENTAL SCIENCE (Physics and Chemistry)

Any two of:

LATIN (Authors and Composition)  
GREEK (Authors and Accidence)  
FRENCH (Authors and Composition)  
GERMAN (Authors and Composition)  
SPANISH (Authors and Composition) *or*  
ITALIAN (Authors and Composition)

†HOUSEHOLD SCIENCE

A candidate who has completed the First Year in the Faculty of Arts may enter at the Second Year.

A candidate who presents Honour Matriculation certificates giving her credit in English, French, Mathematics (Algebra and Geometry), Physics and Chemistry, and one of Greek, Latin, German, Italian or Spanish, History, Trigonometry, Botany and Zoology, may enter at the second year on the payment of the prescribed fee of \$15.

## ADMISSION TO THE HONOUR COURSE

A candidate for admission to the First Year of the Honour Course must present certificates giving her credit in the following subjects of Pass and Honour Matriculation:

†This option applies to students—and to such students only—who have been in attendance at and matriculate from a Technical School in the Province of Ontario and certified as such by the Department of Education of the Province.

## PASS MATRICULATION

ENGLISH (Literature and Composition)  
HISTORY (British and Ancient) *or*  
BRITISH HISTORY and MUSIC  
MATHEMATICS (Algebra and Geometry)  
EXPERIMENTAL SCIENCE (Physics and Chemistry)  
Any one of:

GREEK (Authors and Composition)  
LATIN (Authors and Composition)  
FRENCH (Authors and Composition)  
GERMAN (Authors and Composition)  
SPANISH (Authors and Composition) *or*  
ITALIAN (Authors and Composition)  
†HOUSEHOLD SCIENCE

## HONOUR MATRICULATION

ENGLISH (Literature and Composition)  
MATHEMATICS (Algebra and Geometry)  
One of:

FRENCH (Authors and Composition)  
GERMAN (Authors and Composition)

And one of:

A SECOND LANGUAGE  
HISTORY  
PHYSICS  
BOTANY  
ZOOLOGY  
CHEMISTRY

## FACULTY OF FORESTRY

A candidate for admission to the First Year in the Faculty of Forestry must produce satisfactory certificates of good character and of having completed the seventeenth year of his age on or before the first of October of the year in which he proposes to register.

He must also submit his application for admission in duplicate to the Registrar of the University as early as possible, together with certificates giving him credit in the following subjects of Pass and Honour Matriculation:

---

†This option applies to students—and to such students only—who have been in attendance at and matriculate from a Technical School in the Province of Ontario and certified as such by the Department of Education of the Province.

### PASS MATRICULATION

ENGLISH (Literature and Composition)  
 HISTORY (British and Ancient) *or*  
 BRITISH HISTORY and MUSIC  
 MATHEMATICS (Algebra and Geometry)

Any three of:

LATIN (Authors and Composition)  
 GREEK (Authors and Accidence)  
 FRENCH (Authors and Composition)  
 GERMAN (Authors and Composition)  
 SPANISH (Authors and Composition) *or*  
 ITALIAN (Authors and Composition)  
 EXPERIMENTAL SCIENCE (Physics and Chemistry) *or*  
 AGRICULTURE (Parts I and II).

### HONOUR MATRICULATION

ENGLISH (Literature and Composition)  
 MATHEMATICS (Algebra, Geometry and Trigonometry)

Any one of:

LATIN (Authors and Composition)  
 FRENCH (Authors and Composition)  
 GERMAN (Authors and Composition).

In selecting the options it is recommended that students take French *or* German of Honour Matriculation.

### FACULTY OF MUSIC

A candidate for admission to the Faculty of Music must submit his application for admission to the Secretary of the Faculty, together with certificates giving him credit in the following subjects of Pass Matriculation:

LATIN (Authors and Composition)  
 ENGLISH (Literature and Composition)  
 HISTORY (British and Ancient) *or*  
 BRITISH HISTORY and MUSIC  
 MATHEMATICS (Algebra and Geometry)

Any two of

GREEK (Authors and Accidence)  
 FRENCH (Authors and Composition)  
 GERMAN (Authors and Composition)  
 SPANISH (Authors and Composition) *or*  
 ITALIAN (Authors and Composition)  
 EXPERIMENTAL SCIENCE (Physics and Chemistry) *or*  
 AGRICULTURE (Parts I and II).

## FACULTY OF DENTISTRY

A candidate for admission to the First Year in the Faculty of Dentistry must produce satisfactory certificates of good character and of having completed the sixteenth year of his age on or before the first of October of the year in which he proposed to register.

He must also submit his application for admission in duplicate to the Registrar of the University as early as possible, together with certificates giving him *full* credit in the following subjects of Pass and Honour Matriculation:

## PASS MATRICULATION

LATIN (Authors and Composition)  
ENGLISH (Literature and Composition)  
HISTORY (British and Ancient) *or*  
BRITISH HISTORY and MUSIC  
MATHEMATICS (Algebra and Geometry)  
EXPERIMENTAL SCIENCE (Physics and Chemistry) *or*  
AGRICULTURE (Parts I and II)

Any one of:

GREEK (Authors and Accidence)  
FRENCH (Authors and Composition)  
GERMAN (Authors and Composition)  
SPANISH (Authors and Composition)  
ITALIAN (Authors and Composition).

## HONOUR MATRICULATION

ENGLISH (Literature and Composition)  
MATHEMATICS (Algebra and Geometry)  
TRIGONOMETRY *or* HISTORY  
PHYSICS *or* CHEMISTRY

One of:

LATIN (Authors and Composition)  
GREEK (Authors and Composition)  
FRENCH (Authors and Composition)  
GERMAN (Authors and Composition).

## SPECIAL MATRICULATION CONDITIONS

The regulations outlined on page 4 by which any candidate may receive credit in one or more papers at an examination have rendered unnecessary the special regulations for the industrial candidate. Consequently such candidate will *no longer* be required to send his statement of marks, together with a certificate of employment to the Secretary of the University Matriculation Board, in order to secure credit for the papers in which he has passed.

## ANNUAL EXAMINATION

The examination for Pass and Honour Matriculation is held annually in June at centres in Ontario, and, if application is made to the Senate, the examination may, with the co-operation of the Department of Education, be held at centres outside Ontario.

Applications must be sent not later than May 1st, to the local Public School Inspector, or in the case of candidates intending to write at the University, to the Registrar.

Scholarship candidates must also send a special application by the same date to the Registrar, according to a form to be obtained from him.

The prescribed fee will be paid to the presiding officer by the candidate, when he presents himself for examination.

The Junior Matriculation examination will be held in June at such centres outside Ontario as may from time to time be authorized by the Senate. Applications for the establishment of such local centres must be made to the Registrar not later than April 1st, in each year. Applications from candidates for this examination must be sent to the Registrar not later than May 1st.

The presiding examiner's fee, together with any other necessary expenses in connection with such an examination, must be met by the candidates at the centre, or by the authorities of the School or College on whose application it is held.

## EQUIVALENT EXAMINATIONS

A person who has passed the Matriculation examination of another University may be admitted *ad eundem statum* on such conditions as the Senate, on application, may prescribe.

The local examinations conducted by the University of Oxford and the University of Cambridge may be accepted *pro tanto*.

Certificates of having passed the subjects common to the Matriculation and other examination of any of the following examinations will be accepted *pro tanto*, provided always that the standards of these certificate as to subjects and percentages meet the requirements of this University.

## PROVINCE OF ONTARIO

The Middle School or Upper School examinations or examinations of the same standard under other names.

## PROVINCE OF QUEBEC

The University School Leaving Certificate examination.

The Intermediate School Diploma examination.

## PROVINCE OF NEW BRUNSWICK

The examinations for Grammar School, or Superior or First Class Licences.

## PROVINCE OF NOVA SCOTIA

The Grade XI and Grade XII examinations.

## PROVINCE OF MANITOBA

The Grade XI (Matriculation) and Grade XII examinations.

## PROVINCE OF BRITISH COLUMBIA

The Junior and Senior Matriculation examinations.

## PROVINCE OF PRINCE EDWARD ISLAND

The First Class Teachers' License examination.

## PROVINCE OF ALBERTA

The Grade XI (Junior Matriculation) and Grade XII examinations.

## PROVINCE OF SASKATCHEWAN

The First and Second Class Teachers' examinations.

The Senior and Junior Matriculation examinations.

## NEWFOUNDLAND

Associate in Arts examinations.

Candidates whose certificates do not cover all the subjects may complete matriculation by passing in the remaining subjects as prescribed by the University, or by passing in the subjects of similar standard as prescribed by the Education Department of the Province by which the certificate was issued.

The Senate will consider applications for the recognition of certificates other than those mentioned, as occasion may require.

## FEES

The Fees payable are as follows:—

For registration of certificates for other than University purposes.....	\$5.00
For registration of certificates other than those of Ontario, which exempt the applicant from the full Matriculation examination.....	5.00
For admission <i>ad eundem statum</i> .....	5.00

## MATRICULATION SCHOLARSHIPS

All Matriculation Scholarships offered by the University of Toronto are tenable only by students registered in the Faculty of Arts and proceeding to the degree of Bachelor of Arts, with the exception of the following:

1. The Robert Bruce Scholarship, tenable by students registered in the Faculty of Arts or in the Faculty of Medicine.
2. The Ontario Hockey Association War Memorial Scholarship, tenable by a student in any faculty.
3. The F. W. Jarvis Bursaries, tenable by a student in any faculty.

Where there is no letter prefixed the scholarship is open to all competitors and is tenable in any one of the Colleges. In all other cases, the letter C. indicates University College; the letter V., Victoria College; the letter T., Trinity College; and the letter M., St. Michael's College; the student to whom one of these scholarships is awarded is required to enroll in each year of his course in the College to which the scholarship belongs.

## PASS MATRICULATION SCHOLARSHIPS

Two Scholarships, known as "The First and Second Gibson Pass Matriculation Scholarships", of the value of \$120 and \$100 respectively with free tuition for one year, have been endowed by Sir John M. Gibson, of Hamilton, a graduate in Arts of 1863.

They will be awarded subject to the following conditions:

1. All candidates for these Scholarships must have been *bona fide* students of the Hamilton Collegiate Institute for at least the two years immediately preceding the award.

2. Each candidate must send a special application not later than May 1st to the Registrar of the University according to a form to be obtained from him; in this form he must state in writing that it is his intention to proceed to a degree in Arts in one of the Colleges of the University of Toronto.

3. The Scholarships shall be awarded annually upon the results of the June Pass Matriculation Examinations conducted by the Department of Education of Ontario in the year of the award and in the year immediately preceding the award. The subjects and standards shall be those prescribed for Pass Matriculation in the Faculty of Arts.

4. In each of these two years candidates must present themselves for examination and obtain credit in the subjects for which they have been prepared in accordance with the arrangement of studies in the Hamilton Collegiate Institute.

5. Successful candidates must register in the First Year of the Pass Course in the Faculty of Arts during the session immediately following

the award, unless special permission is granted by the Senate of the University to postpone such registration.

6. The cash payment of the Scholarships shall be made in the month of February in this session. Before payment can be made the scholar must present the prescribed certificate of attendance.

7. In the event that a scholar decides to attend the Hamilton Collegiate Institute for the session following the award, in order to pursue the course of study for Honour Matriculation, the payment of the Scholarship shall be deferred until the scholar registers in the Faculty of Arts at the University.

8. The holder of a Gibson Pass Matriculation Scholarship is not debarred from competing for an Honour Matriculation Scholarship in the University of Toronto.

## HONOUR MATRICULATION SCHOLARSHIPS

### REGULATIONS REGARDING THE UNIVERSITY SCHOLARSHIPS

All Scholarships shall be awarded upon the marks obtained at the examination for Honour Matriculation conducted by the Department of Education of Ontario, and the marks in each subject shall be assigned on the basis of 100 for each paper in the subject as defined on page 3.

Candidates for Matriculation Scholarships must send a special application not later than May 1st to the Registrar of the University, according to a form to be obtained from him.

This application shall be accompanied by certificates showing that the candidate has complete Pass Matriculation standing.

Each candidate shall at the Scholarship examination obtain credit in all the subjects of Honour Matriculation required for admission to the First Year of an Honour Course in the Faculty of Arts, as defined on pages 5 and 6.

A candidate to whom a scholarship has been awarded at a Matriculation examination may not compete for a scholarship at a subsequent Matriculation examination. This regulation does not debar the holder of a Gibson Pass Matriculation Scholarship from competing for an Honour Matriculation Scholarship.

Unless the regulations governing the award of a scholarship state definitely that it may be held with another scholarship, no candidate shall be entitled to hold more than one University scholarship; but any one who, but for this provision, would have been entitled to a second scholarship will be published in the lists.

College Scholarships may be held with University Scholarships.

Every candidate for a Matriculation scholarship tenable only in the Faculty of Arts, shall, on application for examination, sign a declaration to the effect that he intends to proceed to the degree of Bachelor of Arts in this University. Such candidate must at the same time indicate the College in which he intends to enrol.



No scholarship or bursary will be awarded save on condition that the candidate becomes a matriculated student in actual attendance in this University.

Free tuition awarded will be available on the following conditions:—For the First Year on the award of the scholarship; for any year after the first on proof that the claimant has passed his examination for the preceding year with a first class in an honour course.

In case in any year any scholarship be not taken, it will be allowable to award such scholarship, or some part thereof, to a candidate who has shown special excellence in the examination in some other group and has taken scholarship rank therein, but has failed to win a scholarship therein.

These regulations are subject to change by the Senate.

#### REGULATIONS RESPECTING UNIVERSITY COLLEGE SCHOLARSHIPS

Scholarships in University College are tenable with a University Scholarship, always providing that the winner be in first class honours in Classics at Matriculation and becomes and continues to be a registered student in attendance upon lectures either in Classics or in English and History with the Classical option in University College. In the event of no eligible candidate being forthcoming at Matriculation for these scholarships, the scholarships will be held over until the year following.

#### REGULATIONS RESPECTING VICTORIA COLLEGE SCHOLARSHIPS

Scholarships in Victoria College are tenable with a University Scholarship, always providing that the winner be in first class honours at Matriculation and becomes and continues to be a registered student in attendance upon lectures in Victoria College.

#### REGULATIONS RESPECTING TRINITY COLLEGE SCHOLARSHIPS

The regulations governing University Scholarships are applicable to Trinity College Scholarships, *mutatis mutandis*, with the additional regulation that the holder is ordinarily required to reside in College, unless special permission to the contrary is given by the Executive Committee.

As a Trinity College Scholarship is generally held in conjunction with a University Scholarship, the holder in such case enjoys (a) free tuition, (b) the cash value of the University Scholarship, (c) the cash value of the Trinity College Scholarship. For example, if he holds the Wellington Scholarship in Classics and a First Edward Blake Scholarship in the same department, his University Scholarship entitles him to free tuition for four years, which is equivalent to \$300, and he receives in addition \$90 from the University, and \$120 from Trinity College, making a total value of \$510. A further advantage is that the winner is assured of accommodation in the Trinity College Residence (or in St. Hilda's in the case of women), as Scholars are given precedence over all other applicants when rooms are being assigned.

## PROFICIENCY SCHOLARSHIPS

Candidates for Proficiency Scholarships in any one of the following groups must either

(a) Obtain fifty per cent. in each of the eleven papers prescribed in each Group, together with an average of seventy-five per cent., *or*

(b) Obtain First Class Honours in one of the four departments—Classics, Moderns, Mathematics, Science.

In case a candidate fails to secure fifty per cent. in a paper that does not form part of the Honour Matriculation requirements for admission to an Honour Course, he will not necessarily be disqualified from competing for a Proficiency Scholarship, but such mark will not be taken into consideration in the Scholarship award.

## CLASSICS PROFICIENCY

GREEK, LATIN, ENGLISH, FRENCH, HISTORY, MATHEMATICS (Algebra and Geometry).

The First Edward Blake Scholarship, the gift of the late Hon. Edward Blake, formerly Chancellor of this University, of the value of \$100, with free tuition for four years, of a total possible value of \$400.

The Second Edward Blake Scholarship of the value of \$75, with free tuition for four years, of a total possible value of \$375.

The Third Edward Blake Scholarship of the value of \$50, with free tuition for four years, of a total possible value of \$350.

## MODERNS PROFICIENCY

LATIN, ENGLISH, FRENCH, GERMAN, HISTORY, MATHEMATICS (Algebra and Geometry).

The First Edward Blake Scholarship, the gift of the late Hon. Edward Blake, formerly Chancellor of this University, of the value of \$100, with free tuition for four years, of a total possible value of \$400.

The Second Edward Blake Scholarship of the value of \$75, with free tuition for four years, of a total possible value of \$375.

The Third Edward Blake Scholarship of the value of \$50, with free tuition for four years, of a total possible value of \$350.

## MATHEMATICS PROFICIENCY

LATIN, ENGLISH, FRENCH, MATHEMATICS (Algebra, Geometry, Trigonometry, Problems), PHYSICS.

The First Edward Blake Scholarship, the gift of the late Hon. Edward Blake, formerly Chancellor of this University, of the value of \$100, with free tuition for four years, of a total possible value of \$400.

The Second Edward Blake Scholarship of the value of \$75, with free tuition for four years, of a total possible value of \$375.

The Third Edward Blake Scholarship of the value of \$50, with free tuition for four years, of a total possible value of \$350.

#### SCIENCE PROFICIENCY

LATIN, FRENCH, MATHEMATICS (Algebra, Geometry, Trigonometry),  
SCIENCE (Physics, Zoology, Botany, Chemistry).

The First Edward Blake Scholarship, the gift of the late Hon. Edward Blake, formerly Chancellor of this University, of the value of \$100, with free tuition for four years, of a total possible value of \$400.

The Second Edward Blake Scholarship of the value of \$75, with free tuition for four years, of a total possible value of \$375.

The Third Edward Blake Scholarship of the value of \$50, with free tuition for four years, of a total possible value of \$350.

#### SPECIAL PROFICIENCY SCHOLARSHIPS

Candidates for these scholarships are required to obtain First Class Honours in at least one Department.

The Prince of Wales Scholarship, the gift of the late King Edward VII., of the value of \$50, shall be awarded to the candidate standing highest in Latin, French and Algebra and Geometry who is also awarded one of the preceding scholarships.

U. The Gibson Scholarship, the gift of the Hon. Sir John M. Gibson, of the value of \$100, with free tuition for three years, of a total possible value of \$325. This scholarship shall be awarded to the candidate who, qualifying for one of the preceding scholarships and excluding the Prince of Wales Scholar, has the highest aggregate in the subjects of Latin, English, French, History, Algebra and Geometry.

This scholarship is open for competition only to students who have stated their intention of enrolling in University College, and is not tenable with any other matriculation scholarship awarded by the University, except a Gibson Pass Matriculation Scholarship.

V. The Hamilton Fiske Biggar Scholarship of the value of \$100 with free tuition for three years, of a total possible value of \$325. This scholarship shall be awarded to the candidate who, qualifying for one of the preceding scholarships and excluding the Prince of Wales Scholar, has the highest aggregate in the subjects of Latin, English, French, History, Algebra and Geometry.

T. The Upper Canada College-Trinity Scholarship, the gift of Upper Canada College Old Boys, who are alumni of Trinity College, of the value of \$100.

The successful candidate must obtain first class honours in at least one department. Pass papers rank at half the value of Honour papers. The sum of \$60 will be paid in equal terminal instalments in the first year, and \$40 in the second year.

- T. The F. A. Bethune Scholarship, the gift of the trustees of the F. A. Bethune Memorial Fund, of the value of \$60.

This Scholarship will be awarded to the candidate from Trinity College School, Port Hope, who obtains the highest number of marks, being not less than two-thirds of the total, at the Honour Matriculation Examination, and becomes and continues a resident undergraduate of Trinity College, Toronto, for the whole of the year for which he holds the Scholarship.

#### ENGLISH, HISTORY AND CLASSICS.

- T. The Bishop Strachan Scholarship, founded in memory of the first Bishop of Toronto, of the value of \$40 a year for two years.

#### ENGLISH, HISTORY, LATIN AND FRENCH.

- T. The Dickson Scholarship, the gift of the late William Dickson, Esq., of the value of \$60 a year for two years.

### SCHOLARSHIPS IN ONE DEPARTMENT

Candidates for these scholarships must obtain first class honours in their departments.

#### CLASSICS—GREEK AND LATIN

The First Edward Blake Scholarship, the gift of the late Hon. Edward Blake, formerly Chancellor of this University, of the value of \$90, with free tuition for four years, of a total possible value of \$360.

The Second Edward Blake Scholarship of the value of \$60, with free tuition for four years, of a total possible value of \$360.

The First Mary Mulock Scholarship, the gift of the late Mrs. Mulock, of the value of \$60, with free tuition for three years, of a total possible value of \$285.

The Second Mary Mulock Scholarship, the gift of the late Mrs. Mulock, of the value of \$60, with free tuition for two years, of a total possible value of \$210.

- C. The McCaul Scholarship, the gift of G. A. H. Fraser, M.A., formerly Fellow in Classics 1889-91, Andrew Melville Stewart, M.A., LL.B., Honour graduate in Classics, 1891, and Principal Hutton, of the value of \$75, with free tuition for four years, of a total possible value of \$375.

- V. The Moses Henry Aikins Scholarship, the gift of the late Moses Henry Aikins, B.A., 1855, M.D., of the value of \$100, with free tuition for four years, of a total possible value of \$400.
- V. The Flavell Scholarship, the gift of Sir J. W. Flavell, Bart., LL.D., of the value of \$60, with free tuition for three years, of a total possible value of \$285.
- V. The W. E. H. Massey Scholarship, the gift of the late W. E. H. Massey, Esq., of the value of \$50, with free tuition for two years, of a total possible value of \$200.
- T. The Wellington Scholarship, founded by the first Duke of Wellington, of the value of \$60 a year for two years.

#### GREEK.

The George R. R. Cockburn Scholarship, the gift of the late Mary Cockburn. Awarded to the successful candidate at the scholarship examination who ranks highest in First Class Honours in Greek.

This scholarship is tenable with any other University scholarship.

#### MODERNS—ENGLISH, GERMAN, FRENCH

The First Edward Blake Scholarship, the gift of the late Hon. Edward Blake, formerly Chancellor of this University, of the value of \$90, with free tuition for four years, of a total possible value of \$360.

The Second Edward Blake Scholarship of the value of \$60, with free tuition for four years, of a total possible value of \$360.

The Herbert W. Irwin Memorial Scholarship, the gift of the Harbord Graduates' Association, of the value of \$50, to be awarded to the candidate from Harbord Collegiate Institute ranking highest in the Department of Modern Languages at the Scholarship Matriculation Examination, and to be tenable with any other University scholarship.

- V. The Moses Henry Aikins Scholarship, the gift of the late Moses Henry Aikins, B.A., 1855, M.D., of the value of \$100, with free tuition for four years, of a total possible value of \$400.
- T. The Dickson Scholarship, the gift of the late William Dickson, Esq., of the value of \$60 a year for two years.

#### MATHEMATICS—ALGEBRA, GEOMETRY, TRIGONOMETRY, PROBLEMS

The First Edward Blake Scholarship, the gift of the late Hon. Edward Blake, formerly Chancellor of this University, of the value of \$90, with free tuition for four years, of a total possible value of \$360.

The Second Edward Blake Scholarship of the value of \$60, with free tuition for four years, of a total possible value of \$360 each.

- V. The Moses Henry Aikins Scholarship, the gift of the late Moses Henry Aikins, B.A., 1855, M.D., of the value of \$100, with free tuition for four years, of a total possible value of \$400.
- T. The Wellington Scholarship, founded by the first Duke of Wellington, of the value of \$60 a year for two years.
- T. The Professor William Jones Scholarship, of the value of \$100, founded in memory of the late Reverend William Jones, M.A., D.C.L., by relatives and other personal friends. It is open only to students matriculating from Trinity College School, Port Hope.

#### SCIENCE—PHYSICS, CHEMISTRY, ZOOLOGY, BOTANY

The First Edward Blake Scholarship, the gift of the late Hon. Edward Blake, formerly Chancellor of this University, of the value of \$90, with free tuition for four years, of a total possible value of \$360.

The Second Edward Blake Scholarship of the value of \$60, with free tuition for four years, of a total possible value of \$360.

- V. The Moses Henry Aikins Scholarship, the gift of the late Moses Henry Aikins, B.A., 1855, M.D., of the value of \$100, with free tuition for four years, of a total possible value of \$400.
- T. The Burnside Scholarship, founded in memory of the late Dr. Burnside, of the value of \$40 a year for two years.

#### SPECIAL SCHOLARSHIPS AND BURSARIES

##### THE JOHN MCCRAE SCHOLARSHIPS

Two Scholarships, each known as "The John McCrae Scholarship", and of the value of approximately \$275 per year for four years, have been founded in memory of the late Lieutenant-Colonel John McCrae, B.A., M.D., of Montreal, one time Fellow in Biology of the University of Toronto, physician, soldier, poet, who died in France in January, 1918.

The purpose of the Scholarships is to assist youths of ability, promise and approved academic standing, who desire to acquire the education represented by an Arts degree, but whose circumstances are such as to make the fulfilment of that desire impracticable without assistance. It is, moreover, desired that the Scholarships should be used to stimulate such ambition among the pupils of the Guelph Collegiate Institute, John McCrae's home and boyhood school from which he matriculated and entered the University of Toronto. The award will, therefore, be limited to Matriculants into the University of Toronto from the Guelph Collegiate Institute, or failing eligible and acceptable candidates therefrom in any year, from among other Canadian Matriculants. The award shall go to a male candidate if there be one eligible and acceptable—if not, the award may, in exceptional cases, be made to a female. A scholar may be chosen from matriculants of the year in which the award is made or the previous

year. If the award is made to a matriculant of the previous year, and one year of the scholar's course for degree has already been passed, the award may be limited to the remaining three years of the course.

The selection of the scholars shall be made by a Committee composed of the President of the University, the Principal of Guelph Collegiate Institute, and a member or nominee of the family of the late John McCrae. If in any year, an acceptable candidate is not found, the award need not then be made, but may be postponed to the following year; but such postponement shall not affect the next succeeding Scholarship, which shall be offered in the year in which in due course it would otherwise have been available.

Every successful candidate shall, as a condition of the award, sign a declaration of intention to proceed to a degree in Arts in the University of Toronto, and must attend lectures for the academic year immediately following the award, unless permission is granted by the Senate upon the recommendation of the Faculty for the postponement of attendance for a year. The candidate shall also sign a promise to repay to the University any sums paid to him on account of the Scholarship, if from any cause not beyond his control he shall fail to complete the full course in Arts leading to a degree. If, during the currency of the Scholarship, the candidate shall fail to maintain a satisfactory standard of efficiency in scholarship and good conduct, the award may, as to further payments, be cancelled by the selecting body after consultation with the University authorities.

One of these Scholarships will be offered in 1929 and in every second year thereafter. Candidates are required to make a special application on a form to be obtained from the Registrar. One factor in determining the award will be the character of the work shown at the Scholarship Matriculation Examination conducted by the Department of Education of Ontario.

#### THE ONTARIO HOCKEY ASSOCIATION WAR MEMORIAL SCHOLARSHIP

The Ontario Hockey Association War Memorial Scholarship, the gift of the Ontario Hockey Association, is to be awarded annually at the Scholarship Matriculation Examination to a male student who has served overseas with the Canadian forces in the Great War of 1914-1918, or to a student who is the son or daughter of one who has so served.

The value of this Scholarship is \$100 in cash, with exemption from tuition fees to the extent of \$75 per session.

In determining the award of the Scholarship, the academic qualifications of the candidates shall be first taken into account, provided always that no candidate shall be eligible for an award who has not met all the conditions required by the University of candidates for Matriculation Scholarships generally; but, *ceteris paribus*, the award shall be made to a student who is in proved need of assistance.

The award shall be made by the Senate of the University upon the report of a Committee to be appointed by the Senate, upon which Committee there shall be always one member of the Staff of the University who shall be deemed to be the representative of the Association.

Candidates for this Scholarship are required to submit special applications, forms for which may be obtained from the Registrar's Office.

#### THE WILLIAM HARDIE SCHOLARSHIP

The William Hardie Scholarship of the value of \$100, with free tuition for three years, of a total possible value of \$325, was founded in 1922 by friends in Ottawa and Perth in memory of William Hardie, B.A., an ex-pupil and Classical Master (from 1905 until his death in 1920) of Ottawa Collegiate Institute.

This Scholarship is to be awarded annually on the basis of the Scholarship Matriculation Examination of this University to the candidate of Ottawa Collegiate Institute who, having fulfilled all other conditions, ranks highest in First or Second Class Honours in any two of the following subjects—Latin, Greek, English.

This Scholarship is not tenable with any other Honour Matriculation Scholarship awarded by the Senate of the University.

The award shall be made by the Senate of the University.

#### THE F. W. JARVIS BURSARIES

Two Bursaries, known as "The F. W. Jarvis Bursaries", of the value of \$50 each, the gift of A. H. Jarvis, Esq., of Ottawa, brother of F. W. Jarvis, to be awarded under the following conditions:

1. These Bursaries are open only to former students of Ottawa Collegiate Institute (Lisgar Street), who without some such assistance may not be able to carry on their academic courses.
2. They may be awarded at Matriculation or in any year of an undergraduate course in any Faculty of the University.
3. They shall be awarded preferably one to a man and the other to a woman student; but if in any year students of opposite sexes do not apply, both Bursaries may be awarded to men or to women.
4. A Bursary may be held in successive years by the same student and also in conjunction with any scholarship awarded by the University or the federated colleges.
5. The Bursaries shall be awarded by the Senate of the University on the recommendation of a Committee of Award consisting of the President of the University, the Principal of Ottawa Collegiate Institute and the donor; candidates shall make application for the same not later than May 1st on the special form to be obtained from the Registrar.



## THE ROBERT BRUCE SCHOLARSHIP

The Robert Bruce Scholarship, of the value of \$100, shall be awarded to a student for "superior answering" at the Honour Matriculation Examination. The winner of this scholarship must register in either the Faculty of Arts or the Faculty of Medicine; applications for this scholarship must be filed with the Registrar of the University on or before May 1st.

The following regulations govern the award of the scholarship:

- (a) Until 1948 it shall be awarded only to students of Scottish extraction.
- (b) All candidates must have complete Matriculation in this University as at the date of entrance.

The Committee of Award shall consist of the President and the Deans of the Faculties of Arts, Medicine and Applied Science and Engineering.

## THE MOSES HENRY AIKINS SCHOLARSHIPS

- V. Ten scholarships (including the four mentioned above) each known as the Moses Henry Aikins Scholarship, and each of the value of \$100 with free tuition for four years, of a total possible value of \$400, have been founded by the bequest of the late Moses Henry Aikins, B.A., 1855, M.D., of Burnhamthorpe.

In each year some of these scholarships will be available for award to candidates who have shown special excellence in the Matriculation Examinations and are deemed to be of scholarship rank, but who may not have qualified for scholarships in any of the recognized groups of subjects.

## THE LEONARD McLAUGHLIN SCHOLARSHIP

- T. This scholarship has been endowed by Mr. and Mrs. Michael McLaughlin, of Toronto, in memory of their only son Leonard, who was at the time of his death, December 10th, 1899, an undergraduate of Trinity College. As he was a pupil at Upper Canada College from 1890 to 1896, only pupils of that school are eligible for the scholarship. This award will be made by a board consisting of the Provost of Trinity College with the Principal and the Classical Master of Upper Canada College to such candidate as, without written examinations, shows evidence of possessing good scholarship in Classics, as well as manliness, a sense of honour, and a strong moral character. Failing a suitable candidate in Classics, the Board may at its discretion select one in Modern Languages, though it is not under any obligation to make a selection in any given year.

Successful candidates must pursue a course of study in Classics or Modern Languages to the satisfaction of the Board. In case of necessity, to be by it determined, the Board may allow a postponement of the time of beginning the course or an interruption of the same.

The scholarship is worth \$500; \$125 will be paid to successive holders at the end of each Term in the First and Second Years.

#### THE COOPER EXHIBITION

- T. These two exhibitions, founded by the Rev. C. W. Cooper, of the value of \$100 each, are open to any matriculated student of Trinity College not holding a scholarship, with a preference to the sons of clergymen. The exhibitioners are nominated by the Most Reverend the Lord Bishop of Toronto.

#### CORPORATION BURSARIES

- T. The Corporation has provided that five Bursaries of a value of \$50 per annum be open every year for a period not exceeding three years. Any student who shall have passed the Matriculation examination, and shall have satisfied the Executive Committee that he cannot without the aid thus afforded, avail himself of the advantage of a University education, will be eligible for a bursary, provided that he is not the holder of a scholarship or exhibition. *Ceteris paribus* the sons of clergymen will be preferred.

Scholarships, exhibitions and bursaries will be forfeited if the holder fails to keep a term, or to pass any examination at the regular time.

- M. The Silver Episcopal Jubilee Scholarship, the gift of the Toronto Subdivision of the Catholic Women's League of Canada, in honour of the Silver Jubilee of the Most Rev. Neil McNeil, Archbishop of Toronto, of the value of \$100.

This Scholarship open for competition only to women students residing in Toronto.

#### DAUGHTERS OF THE EMPIRE BURSARY

The Imperial Order, Daughters of the Empire, has established a War Memorial Bursary in each province of the Dominion, of the value of \$300 a year for four years, to be awarded to the candidate in either the Pass or the Honour Matriculation examinations who, in the judgment of the Committee, best meets the purpose in view in the foundation of the Bursary. The candidate must be the son or daughter of a killed or totally disabled soldier, sailor or member of the Air Force. In case the holder of the Bursary for the Province of Ontario elects to study at the University of Toronto his fees will be remitted to the extent of \$25 a year provided the student has passed satisfactorily his examinations for the preceding year.

Information respecting the Ontario Bursary may be obtained from the Provincial Educational Secretary, I.O.D.E., Y.W.C.A. Building, Main Street, Hamilton, Ontario, from whom forms of application may be secured.

## THE ONTARIO KNIGHTS OF COLUMBUS SCHOLARSHIPS

The Ontario State Council of the Knights of Columbus has established eight scholarships for competition among the Catholic students writing upon the Pass Matriculation examination conducted for the University Matriculation Board by the Department of Education of Ontario. Each of these Scholarships is of the value of \$100.00 per year, payable during the currency of the course chosen by the successful student; such student may elect to attend any University in Ontario, or any other University approved by the State Executive, or Osgoode Hall, or any Catholic School of Philosophy in Ontario, provided that, where the University chosen has a Catholic college in federation or affiliation therewith, the student enrol through the said Catholic college; such student registering in the Faculty of Arts of the University of Toronto must enrol in St. Michael's College.

Application forms for these Scholarships may be obtained from Mr. T. E. Brown, the State Secretary of the Knights of Columbus, 106 Caroline Avenue, Ottawa, with whom they must be filed on or before May 24th in the year in which the examination is to be completed, and all other communications with respect to these Scholarships must be made to the Secretary from whom further information may be obtained on request.

## PREScription OF COURSES

### PASS MATRICULATION

#### GREEK

Translation into English of passages from the prescribed texts, with questions thereon.

Translation at sight of simple narrative passages similar to the Xenophon prescribed.

Questions on Greek accidence and on the common rules of Greek syntax to test the candidate's accuracy and comprehension in such matters as are needful for the intelligent reading of his texts.

The following are the prescribed texts:—

1928: Xenophon, Philpotts and Jerram, *Easy Selections from Xenophon*, chaps. 3, 4, 5; Rennie's *Selections from Homer* (Edward Arnold, London), *Odyssey*, I, 113-177; V, 291-327; VI, 71-126; IX, 437-472; XII, 165-200; XIV, 1-54; XVII, 290-327; XXII, 1-41.

1929: Xenophon, Philpotts and Jerram, *Selections from Xenophon*, chapters 4 and 5; Colson's *Greek Reader* (Macmillan & Co.), Part IV; Benner's *Selections from Homer's Iliad* (D. Appleton & Co.), I, 148-192, 223-246, 345-363; III, 139-190; VI, 369-502; XXII, 273-363.

1930: Xenophon, Philpotts and Jerram, *Selections from Xenophon*, chapters 3 and 4; Colson's *Greek Reader* (Macmillan & Co.), Parts VI and VII; Benner's *Selections from Homer's Iliad* (D. Appleton & Co.), I, 148-192, 223-246, 345-363; III, 139-190; VI, 369-502; XXII, 273-363.

The use of an abridged edition of Liddell and Scott's *Greek-English Lexicon* is recommended.

Two papers will be set: (1) Prescribed texts; (2) translation at sight, accidence and syntax.

#### LATIN

Translation at sight of passages of average difficulty from *Cæsar*, upon which special stress will be laid.

Translation, with questions, from a prescribed portion of Virgil's *Æneid*.

Examination (not to include translation) upon a short prescribed portion of *Cæsar*, to test the candidate's knowledge of Latin Syntax.

Questions on Latin accidence.

Translation into Latin of English sentences involving a knowledge of the vocabulary and constructions found in the Ontario High School Latin Book, pages 1-420 (revised edition, pages 1-376), omitting all the sections after 500 which are printed in small type, and also the following: 530, 554, 563 (*c*), 630, 631, 632, 635, 637, 665, 672, 674.

The following are the prescribed texts:—

1928: Caesar, *The Siege of Alesia*—High School Latin Reader, Part VI, (Macmillan); Selections from Virgil (W. J. Gage & Co.) Sections 1, 2, 3, 4, 15, 16.

1929: Caesar, *The First Invasion of Britain*—High School Latin Reader, Part IV (Macmillan); Selections from Virgil (W. J. Gage & Co.) Sections 1, 6, 8, 9, 11, 13, 14, 15.

1930: Caesar, *The Second Invasion of Britain*—High School Latin Reader, Part V (Macmillan); Selections from Virgil (W. J. Gage & Co.) Sections 1, 5, 7, 10, 12, 17.

Two papers will be set: (1) Latin Authors, including Virgil, Caesar and Sight Translation; (2) Latin Composition and Grammar.

## ENGLISH

**COMPOSITION:** An essay on one of several themes set by the examiners. In order to pass in this subject, legible writing, correct spelling and punctuation, and idiomatic and grammatical construction of sentences are indispensable. The candidate should also give attention to the structure of the whole essay, the effective ordering of the thought, and the accurate employment of a good English vocabulary. About two pages of foolscap is suggested as the proper length for the essay; but quality, not quantity, will be mainly regarded.

One examination paper.

**LITERATURE:** Such questions only will be set as may serve to test the candidate's familiarity with, and intelligent and appreciative comprehension of, the prescribed texts. The candidate will be expected to have memorized the passages prescribed below. In addition to the questions on the prescribed selections, others will be set on a "sight passage" to test the candidate's ability to interpret literature for himself.

The candidate shall produce satisfactory proof, by the certificate of the principal of the school from which he comes or otherwise, that he has read carefully, during the preceding year, at least four suitable works in English literature (both prose and poetry) in addition to those prescribed below for examination.

One examination paper.

The following are the prescribed texts:—

1928: Intensive Work—Shakespeare, *The Merchant of Venice*.

Extensive Work—Part I of Collection of Shorter Poems; Dickens, *David Copperfield*.

1929: Intensive Work—Shakespeare, *Henry V*; Scott, *The Lady of the Lake*.

Extensive Work—Part IV of Collection of Shorter Poems.

1930: Intensive Work—Shakespeare, *Julius Caesar*; Tennyson, *Lancelot and Elaine*.

Extensive Work—Part I of Collection of Shorter Poems.

1931: Intensive Work—Shakespeare, *Macbeth*; Scott, *Lay of the Last Minstrel*.

Extensive Work—Part II of Collection of Shorter Poems.

The following passages are prescribed for memorization:

1928:

Shakespeare, *The Merchant of Venice*:

- Act I, Sc. 1, ll. 79-99 Let me play . . . their brothers fools.  
 Act II, Sc. 9, ll. 36-49 Who chooseth me . . . to be new varnished.  
 Act IV, Sc. 1, ll. 184-205 The quality of mercy . . . the deeds of mercy.  
 Act V, Sc. 1, ll. 54-65 How sweet the moonlight . . . cannot hear it.  
 Act V, Sc. 1, ll. 102-108 The crow doth sing . . . true proportion.

Collection of Shorter Poems—Part I: Sonnet XXIX; On his Blindness; To Daffodils; London, 1802; To Night; "Of old sat Freedom"; "Home they brought"; The Sands of Dee; The Green Tent; How One Winter Came in the Lake Region.

1929:

Shakespeare, *Henry V*:

- Act I, Sc. 1, ll. 1-18 O for a muse . . . imaginary forces work.  
 Act III, Sc. 1, ll. 1-34 Once more into the breach . . . and St. George.  
 Act IV, Sc. 3, ll. 40-67 This day is called . . . St. Crispin's Day.

Collection of Shorter Poems—Part IV: Ocean, ll. 19-54; On First Looking Into Chapman's Homer; In the Valley of Caunteretz; A Farewell; Cavalier; The Spires of Oxford; Just a Clerk.

1930:

Shakespeare, *Julius Caesar*:

- Act I, Sc. 1, ll. 40-60 O you hard hearts . . . on this ingratitude.  
 Act III, Sc. 1, ll. 148-163 O mighty Caesar . . . spirits of this age.  
 Act III, Sc. 2, ll. 173-196 If you have tears . . . flourished over us.  
 Act IV, Sc. 2, ll. 19-27 Thou hast described . . . in the trial.  
 Act V, Sc. 5, ll. 68-75 This was the noblest . . . was a man.

Collection of Shorter Poems—Part I: Sonnet XXIX; On his Blindness; To Daffodils; London, 1802; To Night; "Of old sat Freedom"; The Sands of Dee; How one Winter Came in the Lake Region.

1931: Shakespeare, *Macbeth*:

Act I, Sc. 5, ll. 16-31 Glamis thou art . . . crowned withal.

Act I, Sc. 7, ll. 1-28 If it were done . . . on the other.

Act II, Sc. 1, ll. 33-64 Is this a dagger . . . to hell.

Act III, Sc. 2, ll. 45-56 Be innocent . . . go with me.

Act V, Sc. 3, ll. 22-28 I have lived . . . dare not.

Act V, Sc. 3, ll. 39-45 Cure her . . . the heart.

Act V, Sc. 5, ll. 16-28 The Queen . . . signifying nothing.

Collection of Shorter Poems, Part II: The Tiger; "You ask me why"; "When I set out for Lyonesse"; The Lake Isle of Innisfree; An April Morning.

### \*FRENCH

The candidate's knowledge of French will be tested by: (1) simple questions on grammar; (2) the translation of simple passages from English into French; (3) translation at sight of easy passages from modern French, and (4) an examination on the following texts:—

The texts contained in the New High School French Reader.

1928: Audoux, Marie Claire à Villevieille (Oxford Press); Labiche, *Le Voyage de Monsieur Perrichon*.

1929: Meilhac and Halévy, *L'Été de la Saint-Martin*; Theuriot, *L'Abbé Daniel* (Blackie's Longer French Texts).

1930: Daudet, *La Belle Nivernaise* (Heath & Co.); Labiche, *Le Voyage de Monsieur Perrichon*.

Two papers will be set: (1) Prescribed texts and translation at sight; questions on grammar; (2) the translation of English into French.

### \*GERMAN

The candidate's knowledge of German will be tested by: (1) simple questions on grammar; (2) the translation of simple passages from English into German; (3) translation at sight of easy passages from modern German; and (4) an examination on the following texts:—

The texts contained in the High School German Reader with the exception of *Von Fallersleben, Deutschland über Alles*.

1928: Arnold, *Fritz auf Ferien*; Ebner-Eschenbach, *Krambambuli*; Benedix, *Der Prozess*.

1929: Gerstäcker, *Germelshausen*; Benedix, *Eigensinn*.

1930: Hauff, *Das kalte Herz* (Macmillan); Elz, *Er ist nicht eifersüchtig*.

Two papers will be set: (1) Prescribed texts and translation at sight; questions on grammar; (2) the translation of English into German.

\*When the edition is not specified, any *unabridged* edition may be used.

## SPANISH

The candidate's knowledge of Spanish will be tested by: (1) questions on grammar; (2) the translation of sentences and connected narrative from English into Spanish; (3) composition in Spanish; (4) translation at sight from Spanish; (5) an examination on the following texts:—

1928, 1929: Hills and Cano, *Cuentos y leyendas* (Heath & Co.); Selgas, *La Mariposa blanca* (Heath & Co.).

1930: Hills and Cano, *Cuentos y leyendas*; Martínez Sierra, *Sueño de una noche de agosto* (Holt & Co.).

Two papers will be set: (1) Prescribed text and translation at sight; questions on grammar; (2) the translation of English into Spanish and composition.

## ITALIAN

The candidate's knowledge of Italian will be tested by: (1) questions on grammar; (2) the translation of sentences and connected narrative from English into Italian; (3) translation at sight from Italian; (4) an examination on the following text:—

1928: Bowen, *Italian Reader* (Heath & Co.); Goldoni, *Il vero amico* (Heath & Co.).

1929: De Amicis, *Cuore* (Heath & Co.); Goldoni, *La Locandiera* (Heath & Co.).

1930: Wilkins and Santelli, *Beginners' Italian Reader*; De Amicis, *Cuore* (Heath & Co.).

Two papers will be set: (1) Prescribed text and translation at sight; (2) questions on grammar and translation of sentences illustrating the grammar.

## HISTORY

**BRITISH HISTORY.**—Great Britain from 1688 to 1920. The geography relating to the history prescribed. One examination paper.

**NOTE.**—The following sections of the course given below are obligatory, viz., 1, 4, 5, 6, and 15. Candidates must also take one of the options in each of (a) and (b) below.

(a) Section 2 and section 3; or section 13 and section 14.

(b) Sections 7, 8 and 9; or sections 10, 11, and 12.

1. Political development 1688 to date:

The Bill of Rights; the significance of the Revolution of 1688.

Origin and development of parties and party government.

Biographical sketches of the great Prime Ministers: Walpole; Pitt, Jr.; Grey; Russell; Melbourne; Peel; Palmerston; Gladstone; Disraeli; Salisbury; Balfour; Asquith; Lloyd George.

Extension of the franchise: The Reform Bills of 1832, 1867, 1884, 1918, etc.



Restriction of the powers of the House of Lords.

2. The American Revolution.

3. The French Revolution; the war with France, 1793-1802; the struggle with Napoleon.

4. The Industrial Revolution.

5. The development of the British Empire in territory and in government.

6. The social life of the people:

(a) Phases: agriculture, commerce, industry, transportation, class distinctions, amusements.

(b) Legislation, e.g., Factory Acts.

7. Literature.

8. Education in the 19th and 20th centuries.

9. Religion.

10. Ireland.

11. External relations, including brief study of nations concerned.

12. The British Navy. The place of sea-power in the development and maintenance of the British Empire.

13. The Great War, especially the part played by the British Empire.

14. The League of Nations.

15. Civics:

Government, with special emphasis on provincial, federal, and imperial government.

A study of the following aspects of the production and distribution of wealth:

(a) The dependence of the citizen upon others for the wealth he uses.

(b) Co-operation and division of labour.

(c) The effects of industrial development upon community life.

(d) The distribution of wealth in wages, salaries, profits, dividends, interest, and rent.

(e) Saving.

(f) What the government does to regulate the production and distribution of wealth.

(g) Voluntary organizations aiding or regulating industry.

#### BOOKS OF REFERENCE

The following books will be found useful for supplementary reading on the topics of the course, and should be placed in every High School library: Mowat, *A new History of Great Britain*, Parts I and II, Oxford Press; Gardiner, *A Student's History of England*, Longmans (or Part III, which deals with the period 1689-1919); McCarthy, *England in the Nineteenth Century*, 2 vols., Putnam; Trevelyan, *British History in the Nineteenth Century*, Longmans; Bell's *English History Source Books*, Vols. VII-XI, 1714-1887, G. Bell & Sons; Kendall, *Source Book of English History*, Macmillan; Piers Plowman *Social and Economic Histories*, Vols. V, VI,

VII, George Philip & Son, London; Cheney, *Industrial and Social History of England*, Macmillan; Hamilton, *How the Fight was Won*, Ontario Department of Education; *Everyman's Literary and Historical Atlas of Europe*, Dent; Philip's *Junior Historical Atlas*, George Philip & Son.

**ANCIENT HISTORY.**—General outlines of the History of Greece to the death of Alexander and of the history of Rome to the death of Augustus, with a brief outline of the art, literature, philosophy, and social life of the Greeks and Romans. The geography relating to the history prescribed. One examination paper.

**GREECE.**—The Early Greek World: effects of geographical features; earlier civilizations; first period of colonization; Homeric age; story of Troy; the City State; life of the people; contributions to later Greek civilization.

Period of Development: colonial expansion; rise of Sparta; classes of society; government: aristocratic constitution; myth of Lycurgus; strength and weakness; rise of Athens to Democracy; abolition of monarchy; the aristocracy (general statement only); Draco, Solon; the tyranny: Pisistratus; the democracy (general statement only); Cleisthenes; Intellectual awakening. The struggle for freedom: war with Persia; conquest of Asiatic Greece; Marathon; Themistocles; the navy; invasion under Xerxes: Thermopylae; Salamis; historic importance of Marathon; results of struggle on Athens.

The Athenian Empire: confederacy of Delos; government under Pericles; the Golden age; social conditions of people; strength and weakness of Athenian democracy; our debt to Athens.

Discord and Decline: the Peloponnesian Wars: (no details regarding battles). Causes: direct; indirect. First stage: land power versus sea power; death of Pericles. Second stage: the Sicilian expedition; Alcibiades. Downfall of Athens: Lysander; terms of peace. Leadership of Sparta (in brief outline): expedition of Cyrus; retreat of the "Ten Thousand"; Xenophon; effects of Spartan violence; Liberation of Thebes; Pelopidas, battle of Leuctra; significance. Leadership of Thebes: Epaminandas; battle of Mantinea. Rise of Macedon: the country and people. Philip: Thebes and Philip; Philip and his army; war with Athens: Chaeromea; Demosthenes. Greece under Philip. Alexander: education; conquests: battle of Issus; founding of Alexandria; battle of Arbela; organization of Empire; death and character; results of his conquests. Contribution of Hellas to civilization: art; literature; philosophy.

**ROME.**—Early Italian world: effects of geographical position; physical features of Italy; tribes of Italy; legendary beginning of Rome (without details of kings). Rome under the kings: family life; religion; social classes; government. The early Republic: the aristocratic Republic; struggle with the Plebs. The charters of Liberty (without details): the twelve tables; Licinian laws; Hortensian laws; the Roman democracy (general statement only). Early struggle for existence: stories of Cincinnatus and

Camillus. Conquest of Italy: Latin and Samnite wars (no details); causes of Rome's success. Italy organized under Rome (general statement only); social conditions. The Punic wars: the First Punic war. The Carthaginian Empire: comparison with Rome. Struggle for Sicily: outline of events; results. The Second Punic war: the Carthaginians in Spain; the invasion of Italy; Hannibal's victories in outline; conquest of Spain by Scipio; battle of Zama; results of the war. The Third Punic war: destruction of Carthage; Carthage a Roman province. The conquest of the East: the struggle with Macedonia (general statement only); destruction of Corinth; Greece a Roman province; war with Syria; effects of conquests: on art and literature; on customs and religion; on social conditions; on political organization. Growth of Plutocracy: evil effects; Cato. Period of Civil Strife—Military Rule: causes of strife (see previous chapter); the reforms of the Gracchi. Marius: the rise of Marius; Jugurtha; the social war. Sulla: the Mithridatic wars; the Sullan constitution; first Civil war; senate made supreme. Rise of Pompey; Sertorius; Spartacus; Pompey as consul; conquests in the east; conspiracy of Catiline; Cicero; the first Triumvirate. Rise of Caesar: conquests in Gaul; second Civil War; cause; defeat of Pompey; Caesar's government and death; Caesar's reforms. Founding of the Empire: Caesar's heir; the second Triumvirate; defeat of Antony; government under Augustus; the Augustus policy; extent of the empire. The Augustine Age: literature; public works; birth of Christ.

#### BOOKS OF REFERENCE

The following books will be found useful for supplementary reading on the topics of the course, and should be placed in every High School library: Breasted, *Ancient Times*, Ginn & Co.; Botsford, *A History of Greece*, Macmillan; Pelham, *Outlines of Roman History*, Putnam; Havell, *Republican Rome*, Ballantyne Press; Cotterill, *Ancient Greece*, Ballantyne Press; Botsford, *A Source Book of Ancient History*, Macmillan; Munro, *A Source Book of Roman History*, Heath & Co.; Fling, *A Source Book of Greek History*, Heath & Co.; Translations of the histories of Herodotus, Thucydides, Polybus and Livy; Ginn's *Classical Atlas*, Ginn & Co.

#### MUSIC

To harmonize a figured bass in four parts using common chords and chords of the dominant seventh with their inversions. The bass may include modulations to nearly related keys, suspensions and passing notes.

To harmonize a simple melody in four parts. This may include suspensions and unaccented passing notes but no modulations.

To answer general questions on the life and works of one composer and to display a knowledge of a specified work by that composer. Such questions only will be set as may serve to test the candidate's familiarity with and intelligent and appreciative comprehension of the prescribed work.

1928: Schubert, Song Cycle "The Maid of the Mill" (Augener, Vol. I, or Novello), the first ten songs only.

1929: Bach, Partita, No. 2, in C minor.

1930: Schumann, Carnival, Op. 9.

## MATHEMATICS

**ALGEBRA.**—Elementary rules; factoring; highest common measure; lowest common multiple; fractions; simple equations of one, two and three unknown quantities; extraction of roots; more advanced factoring; simple graphs; simple ratio and proportion; indices; surds; quadratics of one and two unknown quantities; theory of quadratics.

One examination paper.

**GEOMETRY.**—A.—CONSTRUCTIONS.

To construct a triangle with sides of given lengths.

To construct an angle equal to a given rectilineal angle.

To bisect a given angle.

To bisect a given straight line.

To draw a straight line perpendicular to a given straight line from a given point in it.

To draw a straight line perpendicular to a given straight line from a given point not in the line.

Locus of a point equidistant from two given straight lines.

Locus of a point equidistant from two given points.

To draw a straight line parallel to another, through a given point.

To divide a given straight line into any number of equal parts.

To describe a parallelogram equal to a given triangle, and having an angle equal to a given angle.

To describe a parallelogram equal to a given rectilineal figure, and having an angle equal to a given angle.

On a given straight line to describe a parallelogram equal to a given triangle, and having an angle equal to a given angle.

To find the centre of a given circle.

From a given point to draw a tangent to a given circle.

On a given straight line to construct a segment of a circle containing an angle equal to a given angle.

From a given circle to cut off a segment containing an angle equal to a given angle.

In a circle to inscribe a triangle equiangular to a given triangle.

To find locus of centres of circles touching two given lines.

To inscribe a circle in a given triangle.

To describe a circle touching three given straight lines.

To describe a circle about a given triangle.

About a given circle to describe a triangle equiangular to a given triangle.

To divide a given straight line similarly to another given divided straight line.

To find the fourth proportional to three given straight lines.

To describe a polygon similar to a given polygon, and with the corresponding sides in a given ratio.

To find the mean proportional between two given straight lines.

To construct a polygon similar to a given polygon, and such that their areas are in a given ratio.

To describe a polygon of a given shape and size.

#### B.—THEOREMS.

The sum of the angles of any triangle is equal to two right angles.

The angles at the base of an isosceles triangle are equal, with converse.

If the three sides of one triangle be equal, respectively, to the three sides of another, the triangles are equal in all respects.

If two sides and the included angle of one triangle be equal to two sides and the included angle of another triangle, the triangles are equal in all respects.

If two angles and one side of a triangle be equal to two angles and the corresponding side of another, the triangles are equal in all respects.

If two sides and an angle opposite one of these sides be equal, respectively, in two triangles, the angles opposite the other pair of equal sides are either equal or supplemental.

The sum of the exterior angles of a polygon is four right angles.

The greater side of any triangle has the greater angle opposite it.

The greater angle of any triangle has the greater side opposite it.

If two sides of one triangle be equal respectively to two sides of another, that with the greater contained angle has the greater base, with converse.

If a transversal fall on two parallel lines, prove the relations between angles formed, with converse.

Lines which join equal and parallel straight lines towards the same parts are themselves equal and parallel.

The opposite sides and angles of a parallelogram are equal and each diagonal bisects it.

Parallelograms on the same base, or on equal bases, and between the same parallels are equal.

Triangles on the same base, or on equal bases, and between the same parallels are equal.

Triangles equal in area, and on the same base, are between the same parallels.

If a parallelogram and a triangle be on the same base, and between the same parallels, the parallelogram is double the triangle.

Find expressions for area of a parallelogram, and the area of a triangle.

The complements of the parallelograms about the diagonal of any parallelogram are equal.

The square on the hypotenuse of a right-angled triangle is equal to the sum of the squares on the sides.

If a straight line be divided into any two parts, the sum of the squares on the parts, together with twice the rectangle contained by the parts, is equal to the square on the whole line.

The square on a side of any triangle is equal to the sum of the squares on the two other sides + twice the rectangle contained by either of these sides and the projection of the other side on it.

If more than two equal straight lines can be drawn from the circumference of a circle to a point within it, that point is the centre.

The diameter is the greatest chord in a circle, and a chord nearer the centre is greater than one more remote. Also the greater chord is nearer the centre than the less.

The angle at the centre of a circle is double the angle at the circumference on the same arc.

The angles in the same segment of a circle are equal, with converse.

The opposite angles of a quadrilateral inscribed in a circle are together equal to two right angles, with converse.

The angle in a semicircle is a right angle; in a segment greater than a semicircle less than a right angle; in a segment less than a semicircle greater than a right angle.

A tangent to a circle is perpendicular to the radius at the point of contact; only one tangent can be drawn at a given point on the circumference; the perpendicular to the tangent at the point of contact passes through the centre; the perpendicular from centre on tangent passes through the point of contact.

If two circles touch, the line joining the centres passes through the point of contact.

The angles which a chord drawn from the point of contact makes with the tangent, are equal to the angles in the alternate segments.

The rectangles under the segments of intersecting chords are equal.

If OAB and OC be two straight lines, and  $OA \cdot OB = OC^2$ , OC is a tangent to the circle through A, B, and C.

Triangles of the same altitude are as their bases.

A straight line parallel to the base of a triangle divides the sides proportionally, with converse.

If the vertical angle of a triangle be bisected, the bisector divides the base into segments that are as the sides, with converse.

The analogous proposition when the exterior angle at the vertex is bisected, with converse.

If two triangles are equiangular, the sides are proportional.

If the sides of two triangles are proportional, the triangles are equiangular.

If the sides of two triangles about equal angles are proportional, the triangles are equiangular.

If two triangles have an angle in each equal, and the sides about two other angles proportional, the remaining angles are equal or supplementary.

Similar triangles are as the squares on corresponding sides.

The perpendicular from the right angle of a right-angled triangle on the hypotenuse divides the triangle into two triangles which are similar to the original triangle.

In equal circles angles, whether at the centres or circumferences, are proportional to the arcs on which they stand.

The areas of two similar polygons are as the squares on corresponding sides.

If three straight lines be proportional, the first is to the third as the figure on the first to a similar figure on the second.

Questions and easy deductions on the preceding constructions and theorems.

It is recommended that the study of formal demonstrative Geometry be preceded by a course in Practical Geometry, extending over not more than a year, and embracing the following:—

Definitions; fundamental geometric conceptions and principles; use of simple instruments, as compasses, protractor, graduated rule, etc.; measurement of lines and angles, and construction of lines and angles of given numerical magnitude; accurate construction of figures; some leading propositions in plane geometry reached by induction as a result of accurate construction of figures; deduction also employed as principles are reached and assured. At the examination, questions may be given in Practical Geometry, the constructions being such as naturally spring from the prescribed course. Candidates must provide themselves with a graduated ruler, compasses, set-square and protractor.

In the formal deductive Geometry modifications of Euclid's treatment of the subject will be allowed, though not required, as follows:—

The employment of the "hypothetical construction".

The free employment of the method of superposition including the rotation of figures about an axis, or about a point in a plane.

A modification of Euclid's parallel postulate.

A treatment of ratio and proportion restricted to the case in which the compared magnitudes are commensurable.

One examination paper.

**ARITHMETIC:—**(Only for students of approved Technical Schools preparing to enter the Faculty of Applied Science and Engineering).

Units of Measurement.

Vulgar fractions, decimals, square root, percentage.

Calculation of problems concerned with the building and machine trades—concrete, brickwork, carpentry, plastering, machine-shop practice, sheet metal work, etc.

Mensuration of areas to include rectangle, rhombus, trapezium, triangle, plotting of field notes and finding the area; application of Simpson's rule to irregular figures; circle, sector, segment.

Mensuration of solids to include prism, cylinder, hollow pipes, cone, pyramid, frustum, sphere, solid ring and prismoid.

Elementary knowledge of graphs.

Manipulation and determination of results from formula.

Problems in elementary mechanics to include the lever, pulleys, chain blocks, screws, gear (including differential gear), with applications taken from shop problems.

Logarithms.

### EXPERIMENTAL SCIENCE

**CHEMISTRY:**—An experimental study of the following elements and their more important compounds: hydrogen, oxygen, sulphur, sodium, potassium, nitrogen, chlorine, bromine, iodine, carbon, calcium. The course of work should be arranged so as to give the pupils a knowledge of the following: Mixtures, solutions, compounds, and elements, and their various properties and reactions; acids, bases, and salts. Fundamental laws and principles, as: conservation of mass, definite proportions, multiple proportions, valency, proportions by volume in which gases react. The quantitative meaning and use of chemical symbols, formulae and equations. Chemical nomenclature. Simple quantitative experiments and problems. The application of chemistry to the industries, illustrated by an account of the commercial manufacture and use of some of the more important substances included in this course.

**PHYSICS.**—A course defined as follows, the topics to be presented experimentally with mathematical applications simple and direct in character:

**SOUND.**—Vibratory motion illustrated with pendulums, rods, strings, membranes, and plates.

Types of wave motion illustrated by water waves, waves in a cord, and waves in a coiled spring.

Production, propagation, velocity, and reflection of sound waves; wave lengths.

Intensity, pitch.

Laws of vibration of strings; vibration of air in organ pipes; nodes and loops in vibrating strings, and in vibrating air columns, harmonies, quality, manometric flames.

Interference phenomena; beats.

Resonance.

**HEAT.**—Sources of heat: Transformation of other forms of energy into heat energy.

Expansion due to heat: Anomalous expansion of water and its importance in nature; expansion of gases; Charles' Law.

Temperature and thermometers: Construction and graduation of Centigrade and Fahrenheit thermometers; measurement of temperature on absolute scale.



Quantity of heat: Temperature as contrasted with quantity of heat; heat units; specific heat; determination of the specific heat of a solid and of a liquid.

Fusion: Determination of melting point of ice; heat changes in solution; determination of heat of fusion of ice; the influence of salt in solution on the freezing point.

Vaporization: Determination of heat of vaporization of water; dependence of boiling point on pressure and on the presence of salts in solution; evaporation; practical applications of cooling by vaporization; ice machine.

Transference of heat: Conduction and convection, as illustrated in systems of heating by hot water and by steam; ventilation; radiation; radiant energy; effect of temperature and nature of surface; emission and absorption; selective absorption.

The transformation of heat energy into the energy of mechanical motion as exemplified in the steam engine and in the gas engine.

Heat in connection with meteorology; clouds; rain; winds; dew; frost; dew point; hygrometers (Regnault's and the wet and dry bulb hygrometer).

Nature of heat: Kinetic theory.

LIGHT.—Propagation: Wave theory of light; rectilinear propagation, image through a pin-hole; photometry, shadow and grease-spot photometers.

Reflection: Laws of reflection; images in plane mirrors; images in spherical mirrors, drawing image of object in any position.

Refraction: Laws of refraction; index of refraction, its measurement, and its relation to the velocities of light in media; total reflection.

Lenses: Converging and diverging; determination of focal length; conjugate foci; drawing of images produced by lenses; vision through a lens, relation of the size of the image to the size of the object.

Optical instruments: Simple microscope; camera; projection lantern.

Colour: Decomposition and recombination of white light; spectrum; complementary colours; rainbow.

MAGNETISM AND ELECTRICITY.—Magnetism: Laws of magnetic attraction and repulsion; magnetic field, magnetic lines of force; magnetism by induction; magnetization; molecular theory of magnetization; magnetic permeability, terrestrial magnetism; mariner's compass, inclination and declination of the magnetic needle.

Electricity at rest: Two kinds of electrification; conductors and non-conductors; gold-leaf electroscope; induced electrification; electricity at points and at surfaces; lightning rods; the Leyden jar; simple notions of electrical potential.

Electric current: Production of electric current by voltaic cells; electromotive force of a voltaic cell; detection of the electric current; polarization and local action; simple notions of the relation of electromotive force, current strength, and resistance, names of units; Leclanche cell, dry cell, Daniell cell.

Effects of the electric current: Electrolysis, theory of electrolysis, electroplating, electrotyping, storage cell, laws of electrolysis, measurement of current strength by electrolysis; magnetic effects, electromagnet, relation between the direction of the current and the polarity of an electromagnet, the electric telegraph, the electric bell, the galvanometer, the D.C. motor; heating effects of the current, practical applications, electric stoves, electric irons, electric heaters, electric welding; incandescent and arc lamps.

Induced currents: Production of induced currents; laws of induced currents; Lenz's Law; the transformer; the induction coil; the telephone; a simple type of the A.C. and of the D.C. dynamo. Reasons for the use of the A.C. current; differences in the uses of the A.C. and D.C. current; distribution of electricity as illustrated by the Hydro-Electric System.

Electric measurements: Units of current strength, resistance, and electromotive force; Ohm's Law; measurement of current strength, the ammeter; measurement of electromotive force, the voltmeter; measurement of resistance, the Wheatstone Bridge.

Special forms of radiation: Electric waves, wireless telegraphy.

## AGRICULTURE

### PART I

#### AGRICULTURAL PHYSICS.

**SOIL.**—Classification and identification of samples of soil by the "beaker" method into clay, loam, clay loam, sandy loam and sand; comparison of two soils by the aid of a compound microscope; identification and study of soil in the fields; experiments to show the physical effects of lime on heavy and on light soil; influence of air, cultivation and drainage on the action of lime.

**Tillage:** Uses of plow, cultivator, scuffer, harrow and roller; experiments to show the use of mulches, and the action of frost on heavy soil.

**Drainage:** Methods and value; calculation of cost of tile drainage of a given area.

**SURVEYING.**—Use of instruments (including level and chain) for taking levels, running lines; calculation of areas.

**FARM MECHANICS.**—Care of tools and farm implements; experiments to show warping and splitting of wood on exposure to the weather; practice in sharpening such tools as chisel, knife and scissors; the use of levers and pulleys in machinery; principle of the internal-combustion engine.

**ELECTRICITY.**—Electricity at Rest: Two kinds of electrification; conductors and non-conductors; gold leaf electroscope; induced electrification; electricity at points and surfaces; the Leyden jar; lightning-rods.

**Current Electricity:** Principle of voltaic cells; use of dry cells galvanometer; detection of the current; simple notions of electro-motive force, current strength and resistance including names of units; electro-magnet; relation between the direction of the current and the polarity of a magnet; telegraph; electric bell; electric appliances—irons, stoves, welders, lamps; production of induced currents; laws of induced currents; the induction coil and transformer.

#### AGRICULTURAL CHEMISTRY

**GENERAL.**—A brief experimental study of the following elements: carbon, oxygen, hydrogen, nitrogen, phosphorus, sulphur, potassium, calcium, and the compounds of these elements used by green plants; chemical symbols, formulae and equations; chemical nomenclature.

**Note.**—It is intended that the student through experimental study shall become familiar with the above mentioned elements and their compounds which have direct bearing upon agriculture.

**SOILS.**—Experiments to show how the insoluble compounds of the soil containing calcium and phosphorus may be made soluble (e.g., the action of carbon dioxide and water on calcium carbonates and phosphates); a study of the amount of plant food constituents in soil; the necessity of an abundance of humus and lime (compounds of calcium); nitrification; means of getting nitrogen into the soil; special influence of nitrogen, phosphorus, and potassium compounds on the growth of plants; influence of period of growth, range of root, and ability of plants to assimilate food, on the problem of the manuring for different crops.

**BARNYARD MANURE AND FERTILIZERS.**—Composition, care and treatment of barnyard manure; commercial sources of nitrogen, phosphorus and potassium used to supplement barnyard manure; experiments to prove the presence of and to show the relative solubility of the three plantfood elements in these materials and why certain of the materials should not be mixed; calculation of the percentage of available plantfood in different mixtures of fertilizer materials; explanations of the commercial terms "phosphoric acid" and "potash". The chief provisions of the Fertilizer Act.

**INSECTICIDES AND FUNGICIDES.**—An experimental study of arsenate of lead, arsenate of lime, Paris green, lime-sulphur, Bordeaux mixture, and orchard "dusts"; why some insecticides and fungicides cannot be used in combination.

#### PART II

**BOTANY.**—Calculation of the percentage of foul seed in three or four samples of clover (or alfalfa) and timothy; use of compound microscope in examining spores and mycellia; recognition, from specimens, of rusts, smuts, white rust of crucifers, brown rot of stone fruits, mildew of cherry

or lilac and anthracnose of bean. Chief provisions of Seeds Control Act and Noxious Weeds Act.

ENTOMOLOGY.—Identification, nature of injury, life history and methods of control of any six of the most common harmful insects of the district, e.g., white grub, wire worm, plum curculio, codling moth, San José scale, oyster shell scale, cabbage maggot, cabbage worm, Hessian fly, European corn borer, potato beetle, and clothes moth.

POULTRY.—Practical operation of the incubator—ventilation, moisture, candling eggs, variation in size of air chamber, blood clots, development of the embryo by examining eggs broken open every one or two days during the period of incubation; use of water-glass in preserving eggs; poultry products and marketing.

DAIRYING.—Principles and uses of the Babcock machine and the lactometer; testing cream and skim milk (or whey) for fat; determining whether milk has been watered by use of the formula— $(L.R. \text{ at } 60^{\circ} \text{ plus } \% \text{ of fat}) \div 4 = \% \text{ S.N.F.}$ ; food value of milk and its products; principle and use of the milk separator; making butter with a laboratory churn; use of starters.

FIELD CROPS.—Different types of farming; crop distribution over Ontario; meaning and importance of crop rotation; influence of the keeping of live stock on the kind of rotation; germination tests of seed, e.g., oats, turnips, corn, clover; laboratory work in seed judging and seed selection; meaning and merits of pasture crops, silage crops and soiling crops; the yield and quality of crop as influenced by the time of sowing; calculation of the relative value of certain crops as "money" crops.

ANIMAL HUSBANDRY.—History and characteristics of the chief breeds of horses, cattle, sheep, swine; value and importance of live stock; a survey of the breeds found in the locality; meaning of pedigree stock and grade stock; disadvantage of keeping scrub stock; visit to a local farm to study the stock kept there.

Or

HORTICULTURE.—Orchard management—spraying, pruning, grafting, cultivating; cover crops; packing and marketing apples; methods of producing early vegetables; practice in seeding, transplanting, cultivating mulching; fruit survey for at least two kinds of fruit.

## HOUSEHOLD SCIENCE

*(A course in Home Economics for admission to the courses in the Faculty of Household Science.)*

The course is divided into the following groups:

- A. Clothing and Textiles
- B. Home Management
- C. Foods
- D. Home Nursing.

The general scope of the course is as follows:

A. Clothing and Textiles to include theoretical and practical work.

- (a) Textiles—source, structure, durability, care—simple tests.
- (b) Selection of clothing—for girl—for members of family.
- (c) Construction of clothing.
- (d) Care of clothing.
- (e) Household furnishings.

B. Home Management to include theoretical and practical work.

- (a) Household Equipment
  - Selection (materials, use etc.)
  - care and cleaning
  - cost.
- (b) Economics of the Household
- (c) Household Furnishings
- (d) Laundering.

C. Foods to include theoretical and practical work.

- Foods—classification, general composition, properties, source, selection, care, preparation and serving.
- individual requirements
- dietetic value of types of foods
- menu planning and meal preparation to meet requirements.

D. Home nursing to include theoretical and practical work.

- (a) Elementary Physiology
- (b) Personal Hygiene
- (c) Household and Public Health Requirements
- (d) First Aid and Home Care of the Sick.

Two papers will be set: (1) Clothing and textiles; Home Management.  
(2) Foods and Home Nursing.

Certificates of having completed Courses I and II in Household Science as defined by the Department of Education for Technical Schools will be required from a candidate who writes upon either or both of these papers.

## HONOUR MATRICULATION

### GREEK

Translation into English of passages from the prescribed texts, with questions thereon.

Translation at sight of prose passages of average difficulty from Xenophon's historical works.

Translation into Greek of sentences (based upon Xenophon's vocabulary) to test the candidate's scholarship in matters of accidence, syntax and phraseology.

The following are the prescribed texts:—

1928, 1929: Xenophon, *Hellenica* (Philpotts' Selections, sections I, II and III); Herodotus, *Salamis* (Edwards); Rennie's *Selections from Homer* (Edward Arnold, London)—*Iliad*, I, 148-192, 223-246, 345-363; III, 139-190; VI, 369-502; XXII, 273-363; *Odyssey*, I, 113-177; V, 291-327; VI, 71-126; IX, 437-472; XII, 165-200; XIV, 1-54; XVII, 290-327; XXII, 1-41.

1930: Xenophon, *Hellenica* (Philpotts' Selections, sections I, II and III); Colson's *Greek Reader* (Macmillan and Co.), Part VIII; Rennie's *Selections from Homer* (Edward Arnold, London)—*Iliad*, I, 148-192, 223-246, 345-363; III, 139-190; VI, 369-502; XXII, 273-363; *Odyssey*, I, 113-177; V, 291-327; VI, 71-126; IX, 437-472; XII, 165-200; XIV, 1-54; XVII, 290-327; XXII, 1-41.

Two papers will be set: (1) prescribed texts; (2) translation at sight and Greek prose composition.

## LATIN

Translation into English of passages from prescribed texts, with grammatical questions on these passages and such other questions as arise naturally from the context.

Translation at sight of a passage of average difficulty from Caesar.

Translation into Latin of English sentences to illustrate Latin syntax, and of a continuous passage of English narrative similar to Caesar.

The following are the prescribed texts:—

1928: Caesar, *De Bello Gallico*, Book V, chaps. 24-58; Cicero, *In Catilinam* I; Horace, *Odes* as follows: Book I, 1, 4, 5, 8, 9, 10, 14, 22, 24, 38; Book II, 3, 7, 10, 14, 20; Book III, 1, 3, 5, 8, 9, 13, 16, 21, 23, 30; Book IV, 3, 5, 7, 15.

1929: Caesar, *De Bello Gallico*, Book V, chaps. 24-58; Cicero, *In Catilinam* I; Horace, *Odes* as follows: Book I, 1, 4, 5, 9, 21, 22, 24, 29, 31, 37, 38; Book II, 3, 10, 13, 14, 16; Book III, 1, 2, 5, 7, 9, 13, 18, 23, 29, 30; Book IV, 3, 5, 7.

1930: The same as 1928.

Two examination papers

- (1) Latin Prose Composition and Caesar.
- (2) Cicero, Horace and Sight Translation.

## ENGLISH

**COMPOSITION:** An essay on one of several themes set by the examiners. One examination paper.

**LITERATURE:** The candidate will be expected to have memorized some of the finest passages. Besides questions to test the candidate's familiarity with, and comprehension of, the following selections, questions may also be set to determine within reasonable limits his power of appreciating literary art.

The candidate shall produce satisfactory proof by the certificate of the principal of the school from which he comes or otherwise that he has read carefully, during the preceding year, at least four suitable works in English literature (both prose and poetry) in addition to those prescribed below for examination.

The following are the prescribed texts:

1928: Intensive work—Shakespeare, Henry V; Tennyson, *Morte d'Arthur*, *The Brook*; Browning, *Andrea del Sarto*; Wordsworth, *Michael*; Arnold, *Rugby Chapel*.

Extensive work—Shakespeare, *Twelfth Night*; Scott, *Quentin Durward*; Macaulay, *Essay on Lord Clive*; Part IV of *Collection of Shorter Poems*.

1929: Intensive work—Shakespeare, *Julius Caesar*; Goldsmith, *The Deserted Village*; Browning, *Andrea del Sarto*, *Home Thoughts from Abroad*, *Home Thoughts from the Sea*, *The Patriot*; Tennyson, *Ulysses*, *The Lotus Eaters*, *The Brook*; Arnold, *Sohrab and Rustum*.

Extensive work—Shakespeare, *A Midsummer Night's Dream*; Part II. of *Collection of Shorter Poems*; *Essays and Short Stories (Selections)*.

1930: Intensive work—Shakespeare, *Macbeth*; Gray, *Elegy in a Country Churchyard*; Browning, *Andrea del Sarto*, *Evelyn Hope*; Tennyson, *Morte d'Arthur*, *Locksley Hall*; Coleridge, *The Ancient Mariner*.

Extensive work—Shakespeare, *As You Like It*; Part III. of *Collection of Shorter Poems*; *Essays and Short Stories (Selections)*.

1931: Intensive work—Shakespeare, *The Merchant of Venice*; Milton, *L'Allegro*, *Il Penseroso*; Wordsworth, *Michael*; Browning, *Andrea del Sarto*, *Pheidippides*; Tennyson, *Ode on the Death of the Duke of Wellington*, *Tithonus*.

Extensive work—Shakespeare, *Twelfth Night*; Part IV. of *Collection of Shorter Poems*; *Essays and Short Stories (Selections)*.

The following passages are prescribed for memorization:

1928:

Shakespeare, Henry V:

Act I, Sc. 1, ll.	1- 18	O for a muse . . . imaginary forces work.
Act III, Sc. 1, ll.	1- 34	Once more into the breach . . . and St. George.
Act IV, Sc. 3, ll.	40- 67	This day is called . . . St. Crispin's Day.

Shakespeare, *Twelfth Night*:

- Act I, Sc. 1, ll. 1-15 If music be . . . is high fantastical.  
 Act II, Sc. 4, ll. 113-121 A blank, my lord . . . little in our love.

Collection of Shorter Poems—Part IV: Ocean, ll. 19-54; On First Looking into Chapman's Homer; In the Valley of Caunteretz; A Farewell; Cavalier; The Spires of Oxford; Just a Clerk.

1929: Shakespeare, *Julius Caesar*:

- Act I, Sc. 1, ll. 40-60 O you hard hearts . . . on this ingratitude.  
 Act III, Sc. 1, ll. 148-163 O mighty Caesar . . . spirits of this age.  
 Act III, Sc. 2, ll. 173-196 If you have tears . . . flourished over us.  
 Act IV, Sc. 2, ll. 19-27 Thou hast described . . . on the trial.  
 Act V, Sc. 5, ll. 68-75 This was the noblest . . . was a man.

Collection of Shorter Poems—Part II: The Tiger; "You ask me why"; St. Agnes' Eve, "When I set out for Lyonesse"; The Lake Isle of Innisfree; An April Morning.

1930: Shakespeare, *Macbeth*:

- Act I, Sc. 5, ll. 16-31 Glamis thou art . . . crowned withal.  
 Act III, Sc. 2, ll. 4-26 Nought's had . . . him further.  
 Act III, Sc. 2, ll. 45-56 Be innocent . . . go with me.  
 Act V, Sc. 3, ll. 22-28 I have lived . . . dare not.  
 Act V, Sc. 3, ll. 39-45 Cure her . . . the heart.  
 Act V, Sc. 5, ll. 16-28 The Queen . . . signifying nothing.  
 Shakespeare, As You Like It:  
 Act II, Sc. 1, ll. 1-18 Now my co-mates . . . change it.  
 Act II, Sc. 5, ll. 1-8 Under the greenwood tree...and rough weather.  
 40-47 Who doth ambition shun...and rough weather.  
 Act II, Sc. 7, ll. 139-166 All the world's...sans everything.  
 Act II, Sc. 7, ll. 174-190 The Song.

Collection of Shorter Poems—Part III: "It is not to be thought of"; 'A weary lot is thine'; "The splendour falls"; Far-Far-Away.

1931: Shakespeare, *The Merchant of Venice*:

- Act I, Sc. 1, ll. 79-99 Let me play . . . their brothers fools.  
 Act IV, Sc. 1, ll. 184-205 The quality of mercy . . . the deeds of mercy.  
 Act V, Sc. 1, ll. 54-65 How sweet the moonlight . . . cannot hear it.  
 Act V, Sc. 1, ll. 102-108 The crow doth sing . . . true proportion.

Shakespeare, *Twelfth Night*:

- Act I, Sc. 1, ll. 1-15 If music be . . . is high fantastical.  
 Act II, Sc. 4, ll. 113-121 A blank, my lord . . . little in our love.

Collection of Shorter Poems—Part IV: Ocean, ll. 19-54; On First Looking into Chapman's Homer; In the Valley of Caunteretz; A Farewell; Cavalier; The Spires of Oxford; Just a Clerk.



## \*FRENCH

The prescription of work in grammar, the translation of English into French and sight translation, is the same for honours as for pass, but the examination will be of a more advanced character. The continuous passages of English for translation into French will be based on the prescribed texts.

The following are the prescribed texts:—

1928: Mérimée, *Colomba* (Siepmann's Advanced French Series, Macmillan); Augier et Sandeau, *Le Gendre de Monsieur Poirier* (Siepmann's French Series for Rapid Reading, Macmillan).

1929: Erckmann-Chatrian, *Madame Thérèse*; Labiche, *La Grammaire*.

1930: Labiche, *La Poudre aux Yeux*; Erckmann-Chatrian, *Waterloo* (Heath & Co.).

Two papers will be set: (1) Prescribed texts and translation at sight; questions on grammar; (2) the translation of English into French.

## \*GERMAN

The prescription of work in grammar, the translation of English into German and sight translation, is the same for honours as for pass, but the examination will be of a more advanced character. The continuous passages of English for translation into German will be based on the prescribed texts.

The following are the prescribed texts:—

1928: Baumbach, *Der Schwiegersohn*; Rosen, *Ein Knopf*, and Müller, *Im Wartsalon erster Klasse*, from "Four German Comedies" (Ginn & Co.); Collmann, *Easy German Poetry*, pp. 1-52 (Ginn & Co.).

1929: Moser, *Der Bibliothekar*; Storm, *In St. Jürgen*; Frommel, *Eingeschnitten*.

1930: Baumbach, *Der Schwiegersohn*; Rosegger, *Der Lex von Gutenhag*; German Poetry (to be specified later).

Two papers will be set: (1) Prescribed texts and translation at sight; questions on grammar; (2) the translation of English into German.

## SPANISH

The prescription of work in grammar, the translation of English into Spanish, and sight translation, is the same for honours as for pass, but the examination will be of a more advanced character.

The following are the prescribed texts:—

1928: Pardo Bazán, *El tesoro de Gastón* (Holt & Co.); Ramos Carrión y Aza, *Zaragüeta* (Silver, Burdett & Co.).

1929: Azorín, *Las Confesiones* (Heath & Co.); Alarcón, *El Capitán Veneno* (Holt & Co.).

\*When the edition is not specified any *unabridged* edition may be used.

1930: Marcial Dorado, *España pintoresca* (Ginn & Co.); Martínez Sierra, *Sol de la tarde* (Heath & Co.).

Two papers will be set: (1) Prescribed text and translation at sight; questions on grammar; (2) the translation of English into Spanish and composition.

### ITALIAN

The prescription of work in grammar, the translation of English into Italian, and sight translation, is the same for honours as for pass, but the examination will be of a more advanced character.

The following are the prescribed texts:—

1928: Wilkins and Altrocchi, *Italian Short Stories* (Heath and Co.); Fogazzaro, *Peregrinazioni*, pp. 1-64 (Heath & Co.).

1929, 1930: Wilkins and Marinoni, *L'Italia* (University of Chicago Press); Wilkins and Altrocchi, *Italian Short Stories* (Heath & Co.).

Two papers will be set: (1) Prescribed text and translation at sight; (2) questions on grammar and translation of sentences illustrating the grammar.

### HISTORY

Modern World History from 1789 to 1920. The geography relating to the history prescribed. One examination paper.

NOTE—The following sections of the course given below are obligatory: 1, 2, 3, 7, 8, and 12. In addition candidates must take either sections 4 and 6 or section 5, and either sections 9 and 10 or section 11.

1. A brief survey of conditions at the beginning of the period: (a) political, (b) social and economic, (c) educational, (d) religious.

2. The French Revolution, 1789-1799, and its influence on other peoples.

3. The Napoleonic Era, 1799-1815, and its world results.

4. The period of reaction after 1815.

5. The Industrial Revolution from its beginnings in the first half of the eighteenth century.

6. The growth of democracy to 1850: on the continent of Europe, in Great Britain, in Canada.

7. The development of Nationalism after 1850: France, Italy, Germany, Russia, the Balkan States.

8. The growth of great empires: British Empire, German Empire, Russian Empire, France, Japan, the United States.

9. International relations: Chief alliances of European powers, the Monroe doctrine.

10. The Great War: causes, great events, results.

11. Survey of the progress of civilization during the period: political, social and economic, educational (including literature and art), scientific, religious.

12. Development of government in Upper and Lower Canada, 1783-1867, and in the Dominion of Canada, 1867-1920, as outlined in the Ontario High School History of Canada.

#### BOOKS OF REFERENCE

The following books will be found useful for supplementary reading on the topics of the course and should be placed in every High School library: Robinson and Beard, *A History of Europe: Our Own Times*, Ginn & Co.; Hazen, *Modern European History*, Holt; Hayes, *Political and Social History of Modern Europe*, 2 vols., Macmillan; Robinson and Beard, *Readings in Modern European History*, 2 vols, Ginn & Co.; Matthews, *The French Revolution*, Longmans; Belloc, *The French Revolution*, Ryerson Press; Fisher, *Napoleon*, Ryerson Press; Seymour, *Diplomatic Background of the War*, Yale University Press; Robertson and Bartholomew, *Atlas of Modern European History*, Oxford University Press; Hearnshaw, *Historical Atlas of Modern Europe*, Macmillan.

#### MATHEMATICS

**ALGEBRA.**—Elementary rules; factoring; highest common measure; lowest common multiple; fractions; simple equations of one, two and three unknown quantities; extraction of roots; more advanced factoring; simple graphs; simple ratios and proportion; indices and surds; quadratics of one and two unknown quantities; theory of quadratics; theory of divisors; ratio, proportion and variation; progressions; notation; permutations and combinations; binomial theorem; interest forms; annuities and sinking funds.

One examination paper.

**TRIGONOMETRY.**—The trigonometrical ratios with their relations to one another; sines, etc., of the sum and difference of angles, with deduced formulas; use of logarithms; solution of triangles; expression for the area of triangles; inverse functions, radii of circumscribed, inscribed and escribed circles.

One examination paper.

**PROBLEMS:** One paper. (For certain scholarship candidates only.)

**GEOMETRY:** A candidate must take section C and either section A or section B.

## A.—SYNTHETIC GEOMETRY

Exercises on the course prescribed for the pass examination, with special reference to the following topics: loci; maxima and minima; the system of inscribed, escribed and circumscribed circles of a triangle, with metrical relations; radical axis.

The following additional propositions in Synthetic Geometry, with exercises thereon:—

To divide a given straight line internally and externally in medial section.

To describe a square that shall be equal to a given rectilineal figure.

To describe an isosceles triangle having each of the angles at the base double of the third angle.

To inscribe a regular pentagon in a given circle.

The squares on two sides of a triangle are together equal to twice the square on half the third side and twice the square on the median to that side.

If  $ABC$  be a triangle, and  $A$  be joined to a point  $P$  of the base such that  $BP:PC = m:n$ , then  $nAB^2 + mAC^2 = (m+n)AP^2 + nBP^2 + mPC^2$ .

In a right-angled triangle the rectilineal figure described on the hypotenuse is equal to the sum of the similar and similarly described figures on the two other sides.

If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the segments of the base, together with the square on the straight line which bisects the angle.

If from the vertical angle of a triangle a straight line be drawn perpendicular to the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the perpendicular and the diameter of the circle described about the triangle.

The rectangle contained by the diagonals of a quadrilateral inscribed in a circle is equal to the sum of the two rectangles contained by its opposite sides.

Two similar polygons may be so placed that the lines joining corresponding points are concurrent.

If a straight line meet the sides  $BC$ ,  $CA$ ,  $AB$ , of a triangle  $ABC$  in  $D$ ,  $E$ ,  $F$ , respectively, then  $BD \cdot CE \cdot AF = DC \cdot EA \cdot FB$ , and conversely. (Menelaus' Theorem.)

If straight lines through the angular points  $A$ ,  $B$ ,  $C$  of a triangle are concurrent, and intersect the opposite sides in  $D$ ,  $E$ ,  $F$ , respectively, then  $BD \cdot CE \cdot AF = DC \cdot EA \cdot FB$ , and conversely. (Ceva's Theorem.)

If a point  $A$  lie on the polar of a point  $B$  with respect to a circle, then  $B$  lies on polar of  $A$ .

Any straight line which passes through a fixed point is cut harmonically by the point, any circle, and the polar of the point with respect to the circle.

In a complete quadrilateral each diagonal is divided harmonically by the two other diagonals, and at the angular points through which it passes.

### B.—ELEMENTARY SOLID GEOMETRY

Definitions: General description of figures in three dimensions.

The following propositions, with exercises thereon:

A plane is determined by (a) a straight line and point not on it, (b) two intersecting straight lines, (c) two parallel straight lines.

Two intersecting planes cut one another in a straight line and in no other point.

If two straight lines are parallel, any plane intersecting one of them intersects the other.

If two planes are parallel, any straight line intersecting one of them intersects the other.

If a straight line is perpendicular to two intersecting straight lines at their point of intersection, it is perpendicular to every straight line in their plane through their point of intersection.

Conversely, all straight lines intersecting a given straight line at a given point and perpendicular to it lie in a plane.

If one of two parallel straight lines is perpendicular to a plane, the other is also.

Conversely, if two straight lines are perpendicular to the same plane, they are parallel.

If a straight line be at right angles to a plane, any plane through the line is perpendicular to the plane.

To draw a perpendicular to a given plane from a given point.

One, and only one, straight line can be drawn through a given point and perpendicular to a given plane.

The perpendicular from a given point to a plane is the shortest distance from the point to the plane.

If two straight lines are parallel to the same straight line they are parallel to each other.

If two intersecting straight lines are parallel respectively to two other intersecting straight lines the contained angles are equal.

If two planes have a common perpendicular they are parallel, and conversely.

If two intersecting straight lines are respectively parallel to two other intersecting straight lines, the plane of the first two is parallel to the plane of the second two.

Straight lines which are cut by three or more parallel planes are cut proportionally.

To draw a perpendicular to two given straight lines not in the same plane.

There is only one common perpendicular to two straight lines not in the same plane.

In a tetrahedron the sum of any two angles at a vertex is greater than the third; and the sum of three angles is less than three right angles.

In a polyhedron the sum of the number of faces and the number of corners or vertices is two greater than the number of edges.

There are not more than five regular polyhedra.

The four diagonals of a parallelepiped are concurrent and bisect one another.

The four straight lines which join vertices of a tetrahedron to the centroids of the opposite faces meet in a point which divides them in the ratio 3:1; and the three lines which join the middle points of opposite edges meet in the same point and are bisected there.

Any plane section of a pyramid taken parallel to the base, is similar to the base, and the area of such a section varies as the square of its distance from the vertex.

The volumes of two pyramids of equal heights and equal base areas are equal.

One sphere and only one can pass through four points not in the same plane.

Mensuration of volumes, surface areas, linear measurements in the following: prism; pyramid; cylinder; cone; frustum of cone, pyramid, or sphere; zone of a sphere.

### C.—ELEMENTARY ANALYTICAL GEOMETRY

Axes of co-ordinates. Position of a point in plane of reference.

Transformation of co-ordinates,—origin changed, or axes (rectangular) turned through a given angle.

$$\pm xA = x_1(y_2 - y_3) + \dots + \dots$$

Co-ordinates of point dividing line joining  $P_1(x_1, y_1)$  and  $P_2(x_2, y_2)$  in ratio  $m:n$  are  $x = \frac{mx_2 + nx_1}{m+n}$ ,  $y = \frac{my_2 + ny_1}{m+n}$

$$(P_1 P_2)^2 = (x_1 - x_2)^2 + (y_1 - y_2)^2$$

Equations of straight lines.

$$\left. \begin{aligned} \frac{x - x_1}{x_1 - x_2} &= \frac{y - y_1}{y_1 - y_2} \\ \frac{x}{a} + \frac{y}{b} &= 1. \\ \frac{x - a}{\cos \theta} &= \frac{y - b}{\sin \theta} = r. \\ y &= mx + b. \\ y &= m(x - a). \\ x \cos \alpha + y \sin \alpha &= p. \end{aligned} \right\} \begin{array}{l} \text{Line defined by two points} \\ \text{through which it passes.} \\ \\ \\ \text{Line defined by one point} \\ \text{through which it passes} \\ \text{and by its direction.} \end{array}$$

General equation of 1st degree,  $Ax + By + C = 0$ , represents a straight line.

Any line through  $(x_1, y_1)$  is  $A(x - x_1) + B(y - y_1) = 0$ .

If  $\theta$  be angle between  $Ax + By + C = 0$  and  $A'x + B'y + C' = 0$ , then

$$\tan \theta = \frac{A'B - AB'}{AA' + BB'}$$

Condition of  $\perp$  rity,  $AA' + BB' = 0$ .

Condition of  $\parallel$  ism,  $\frac{A}{A'} = \frac{B}{B'}$ .

Distance from  $(a, b)$  to  $Ax + By + C = 0$ , in direction whose direction cosines are  $(l, m)$  is  $= \frac{Aa + Bb + C}{Al + Bm}$ .

$\perp$  distance from  $(a, b)$  on  $Ax + By + C = 0$ .  

$$\pm \frac{Aa + Bb + C}{\sqrt{A^2 + B^2}}$$

#### THE CIRCLE—

Equations in forms:

$$\begin{aligned} x^2 + y^2 &= r^2 \\ (x - a)^2 + (y - b)^2 &= r^2 \\ x^2 + y^2 - 2rx &= 0. \end{aligned}$$

General equation  $x^2 + y^2 + 2Ax + 2By + C = 0$ ,

or  $(x + A)^2 + (y + B)^2 = A^2 + B^2 - C$ ,

represents a circle with centre  $(-A, -B)$  and radius  $\sqrt{A^2 + B^2 - C}$

Tangent at  $(x', y')$  to  $x^2 + y^2 = r^2$ , is  $xx' + yy' = r^2$ .

Normal is  $\frac{x}{x'} = \frac{y}{y'}$ .

Tangent in form  $y = mx \pm r\sqrt{1 + m^2}$ .

Pole being  $(x', y')$ , polar is  $xx' + yy' = r^2$ .

If pole move along a line, polar turns about pole of that line.

Square of tangent from  $(x', y')$  to  $x^2 + y^2 + 2Ax + 2By + C = 0$

is  $x'^2 + y'^2 + 2Ax' + 2By' + C$ .

Radical axis of  $x^2 + y^2 + 2Ax + 2By + C = 0$ ,

$x^2 + y^2 + 2A'x + 2B'y + C' = 0$ .

Easy exercises on the preceding propositions.

One examination paper.

#### PHYSICS

A course defined as follows, the topics to be presented experimentally with mathematical applications simple and direct in character:

**MECHANICS OF SOLIDS.**—Metric and English units of length. Use of vernier calipers, screw-gauge, in measurement of wires, cylinders, spheres, plates, etc.

Unit of time.

Motion: velocity, uniform and variable; average velocity; velocity at a point.

Newton's first law of motion, force, inertia, and mass; metric and English units of mass.

Acceleration, measurement of uniform acceleration, acceleration due to gravity, value, of  $g$ .

Momentum; Newton's second law; measurement of force; metric and English absolute and gravitational units of force.

Newton's third law; conservation of momentum; centripetal and centrifugal force with illustrations, centrifuge, cream separator, form of earth, etc.

Composition and resolution of forces; parallelogram of forces; triangle of forces; moments; couples; centre of gravity.

Friction; laws of friction; co-efficient of friction.

Gravitation: Newton's laws of gravitation; Cavendish's experiment.

Work: measurement of work in metric and English absolute and gravitational units; energy; measurement of energy; kinetic and potential energy; conservation of energy.

Power: measurement of power; horse power; the watt.

Machines: mechanical advantage; lever; wheel and axle; pulley; inclined plane; screw; wedge; simple combinations of the foregoing.

**MECHANICS OF FLUIDS.**—Pressure: pressure at a point; Pascal's law; pressure due to gravity; equilibrium of fluids at rest; Archimedes' principle; buoyancy; hydraulic pressure; specific gravity; determination of specific gravity of solids and liquids.

Atmospheric pressure: barometers; weight of air; pressure due to molecular motion; lift and force pumps; siphon; the use of compressed air; airbrakes, air tools.

Velocity due to pressure: Torricelli's theorem; pressure in a moving column of fluid varies with the velocity; application to explain the principle of the atomizer, the Bunsen burner, the Bunsen filter pump, forced draught, the curved flight of a ball.

Surface tension: surface force; surface energy; capillarity; practical applications.

**TRANSFORMATIONS OF ENERGY.**—Mechanical equivalent of heat, measured mechanically and electrically; measurement of electrical energy; the kilowatt hour.

## CHEMISTRY

Chemistry of Pass Matriculation reviewed and continued.

Reversible reactions and chemical equilibrium: e.g., ice = water; water = steam; bluestone = anhydrous copper sulphate and water; limestone = quick lime and carbon dioxide; ferric chloride and ammonium sulphocyanate = ferric sulphocyanate and ammonium chloride (in solution); a salt in equilibrium with saturated solution, etc. Conditions which effect equilibrium.



Rate of reaction and conditions that effect it (including catalysis), *e.g.*, the action of a dilute solution of potassium permanganate, oxalic acid, in presence of sulphuric acid, the souring of milk, etc.

A study of the following elements and their most characteristic compounds, having regard to Mendelejeff's classification and to their most important economic and industrial applications: hydrogen, sodium, potassium, magnesium, zinc, calcium, aluminium, carbon, lead, nitrogen, phosphorus, arsenic, antimony, oxygen, sulphur, chlorine, bromine, iodine, iron, copper, silver.

Qualitative analysis (practical) may be used for studying the properties of the above elements and for further illustrations of reversible reactions and chemical equilibrium: *e.g.*, a very dilute solution of lead nitrate does not give a precipitate of lead chloride and the same solution may give a precipitate of lead sulphide and from this we may draw conclusions as to the relative solubility of these lead compounds; a dilute solution of lead nitrate with sulphuric acid gives a precipitate of lead sulphate soluble in nitric acid, etc.

It should be kept in mind that the student is not learning analysis but is using the scheme for qualitative analysis to provide illustrations of chemical equilibrium and to illustrate the properties of the compounds, *e.g.*, insolubility, etc.

Organic chemistry; alcohols, acids and esters (fats); methyl alcohol, ethyl alcohol, glycerine, acetic acid, stearic acid, ethyl acetate, tallow and lard. Soap making. Carbohydrates: glucose, cane sugar, starch, cellulose. Hydrolysis of starch. Proteins. Petroleum and its commercial products. Fractional distillation. These organic compounds should be treated from the descriptive point of view and few formulas should be used.

NOTE.—It is suggested that the topics under "Organic Chemistry" be not treated more exhaustively than they are in such text-books as: Alexander Smith's *Intermediate Chemistry*, Macpherson and Henderson's *First Course in Chemistry*.

## BIOLOGY

### ZOOLOGY

Practical study of the external form of all types, and the dissection or the study of prepared specimens (or models), as specified below. Observational drawings are essential.

Mode of life and life history of the various types. Reasons for including these types in their respective groups.

ARTHEPODA.—Practical study of the external features of the crayfish, including segmentation and appendages, mode of locomotion and respiration. Description, life-history and relation to man of the following insects: May beetle, European corn borer, codling moth, tent caterpillar, mosquito, honey bee, ichneumon fly. Comparison of the external features of the crayfish, grasshopper (or cricket), millipede and spider.

Study of the principles of classification as illustrated by the Arthropoda. Recognition-characters of the following orders of insects: Orthoptera, Coleoptera, Odonata, Diptera, Lepidoptera, Hemiptera and Hymenoptera.

VERMES.—Practical study of the external features of the earthworm. Dissection of the earth-worm. Study of cross-section of the earth-worm for arrangement of chief organ systems only. Mode of locomotion and respiration.

MOLLUSCA.—Practical study of the external features and mode of locomotion and respiration, of the fresh-water clam; comparison in these respects with the snail.

PROTOZOA.—A practical study of the living amoeba or paramoecium.

CHORDATA.—

PISCES.—Practical study of the external features; chief visceral organs; circulation and respiration of some common fish.

AMPHIBIA.—Practical study of the frog under the following headings: (a) external features; (b) the skeleton; (c) the organs of respiration, circulation, digestion and excretion; (d) the central nervous system; (e) the attachment and action of a muscle of the hind leg. Study of a cross-section of the frog for arrangement of organ systems. Observation of the external features of the development of a frog or toad. Comparison of a frog with a fish as to organs of locomotion, circulation and respiration.

REPTILIA.—Practical study of the external features of a snake and a turtle.

AVES.—Practical study of the external features, plumage and skeleton of some common bird. Adaptations to flight with special reference to the form, skeleton, and organs of respiration.

Chief types of bills and feet.

MAMMALIA.—Practical study of a (a) chief features of the skeleton; (b) organs of respiration, circulation, digestion and excretion, of a rabbit or a cat.

Comparison of the brain of a rabbit (or cat) with that of a bird, and of a frog.

Study of mammalian eye from a specimen or from a model.

NOTE.—Except in the case of the frog and of the earthworm where dissection is required, prepared specimens or models may be used. The cross-sections of the frog and of the earthworm should be studied with the low power microscope.

## BOTANY

EXPERIMENTAL PHYSIOLOGY.—Practical studies of absorption (osmosis), plasmolysis, transpiration, photosynthesis, respiration, irritability (e.g., heliotropism), and rate of growth.

**MORPHOLOGY AND PHYSIOLOGY.**—Structure and general functions of the following plant organs: leaf, root, stem, flower, seed, fruit. Modification of roots, stems, and leaves for the special functions of storage and support. Light relations of leaves. Stipules, spines and bud-scales. Underground stems, comparison of roots and stems. Pollination and adaptations for cross-pollination. Fertilization, seed dispersal, vegetation reproduction as contrasted with sexual reproduction. Study of typical seeds. Classification of fruits. A study by means of sections of the cellular structure of the leaf and of the relative arrangement of the more important tissues and tissue systems of the stem and root of bean and maize, or of any other typical dicotyledon and monocotyledon.

**CRYPTOGAMS.**—The practical study of representatives of the chief subdivisions of the cryptogams: spirogyra, a mushroom, a lichen, a liverwort, a moss, a horsetail, a clubmoss, and a fern. Distribution and economic importance of yeasts and bacteria. Microscopic structure of the yeast plant. Microscopic observation of a bacterial colony.

Recognition, economic importance and control of the following parasitic fungi: grain rust, loose smut of oats or corn smut, apple scab and black knot.

**PHANEROGAMS.**—The practical study of representative of the seed plants of the locality, including at least one member of each of the following orders: Coniferae, Gramineae, Liliaceae, Ranunculaceae, Cruciferae, Rosaceae, Leguminosae, Sapindaceae, Umbelliferae, Labiatae, Scrophulariaceae, Compositae.

**ECOLOGY.**—*Relation of the structure of plants to their environment.* Plant associations, *e.g.*, mesophytes, hydrophytes, xerophytes. Characteristics of these classes.

**CLASSIFICATION.**—The placing of the types studied in their natural divisions, characteristics of these divisions.

Comparison of the ecological with the structural classification.



---

FACULTY OF ARTS

---

## DEGREE OF BACHELOR OF ARTS

### I. COURSES LEADING TO THE DEGREE

1. A candidate for the degree of Bachelor of Arts must take one of the courses prescribed by the University.

2. The courses for the degree of Bachelor of Arts extend over a period of four academic years.

3. Unless specially exempted by the Council, every undergraduate proceeding to the degree must be in attendance on lectures at the University and at one of the Colleges throughout the session in all the subjects of his academic year. The Arts Colleges in the University are: University College, Victoria College, Trinity College, and St. Michael's College. Information regarding the relation of the Colleges to the University will be found on page 31.

4. Unless in exceptional cases and by special petition to the Council, a student will not be allowed to register in more than one course.

5. The courses leading to the degree of Bachelor of Arts are:

(a) THE PASS COURSE

(b) The following Honour Courses:

CLASSICS	MATHEMATICS AND PHYSICS
GREEK AND HEBREW	PHYSICS AND CHEMISTRY
ORIENTAL LANGUAGES	PHYSICS
HEBREW AND ANCIENT HISTORY	BIOLOGY
FRENCH GREEK AND LATIN	PHYSIOLOGY AND BIOCHEMISTRY
MODERN LANGUAGES	BIOLOGICAL AND MEDICAL SCIENCES
ENGLISH AND HISTORY	CHEMISTRY
MODERN HISTORY	CHEMISTRY MINERALOGY AND
POLITICAL SCIENCE	GEOLOGY
PHILOSOPHY	GEOLOGY AND MINERALOGY
PHILOSOPHY (ENGLISH OR HISTORY	SCIENCE (GENERAL)
OPTION)	HOUSEHOLD SCIENCE
PSYCHOLOGY	HOUSEHOLD ECONOMICS
MATHEMATICS	

## ADMISSION TO THE PASS COURSE

6. A candidate for admission to the First Year of the Pass Course must present certificates giving him credit for complete Pass Matriculation.

7. A candidate for admission who presents, in addition to complete Pass Matriculation, certificates giving him credit at the Honour Matriculation examination in at least five of the six subjects set forth in the schedule below, may be admitted to the Second Year of the Pass Course; a candidate who lacks credit for one of the six subjects will be required to pass the First Year or equivalent examination in that subject before he will be allowed to register in the Third Year. A candidate who has not complete Pass Matriculation may be admitted to the Second Year of the Pass Course if he presents certificates giving him credit at the Honour Matriculation examination in all six subjects. The prescribed fee for such admission to the Second Year is fifteen dollars. The subjects of Honour Matriculation which will be accepted as equivalent to the work of the First Year of the Pass Course are as follows:

1. English
2. Latin
3. Algebra and Geometry
4. One of Greek, German, French, Italian or Spanish
5. History or Trigonometry
6. One of a second language from 4, Physics, Zoology, Botany, Chemistry.

## ADMISSION TO AN HONOUR COURSE

8. Every student applying to enter the First Year of an Honour Course must present, in addition to complete Pass Matriculation standing, certificates giving him credit (see Section 14) at the Honour Matriculation or equivalent examination in the *five* subjects prescribed below for the Honour Course which he wishes to enter.

NOTE—*The term "additional subject" includes any one of English, History, Greek, French, German, Italian, Spanish, Trigonometry, Physics, Zoology, Botany, Chemistry.*

CLASSICS:—Greek; Latin; Mathematics (Algebra and Geometry); together with two additional subjects, one of which should be French or German.

FRENCH GREEK AND LATIN:—Latin; Mathematics (Algebra and Geometry); two of Greek, English, French; together with an additional subject.

MODERN LANGUAGES:—Latin; Mathematics (Algebra and Geometry); two of German, French, Italian, Spanish; together with an additional subject.

ENGLISH AND HISTORY:—Latin; Mathematics (Algebra and Geometry); two of Greek, English, German, French; together with an additional subject.

\***MODERN HISTORY** { Latin; Mathematics (Algebra and Geometry);  
History; French or German; together with an  
additional subject.

\***POLITICAL SCIENCE** { Latin; English; Mathematics (Algebra and Geometry),  
one of History, Greek, French, German, Physics; together with an  
additional subject.

**PHILOSOPHY (ENGLISH OR HISTORY OPTION):**—Latin; Mathematics  
(Algebra and Geometry); one of History, English, Physics; one of  
Greek, French, German; together with an additional subject.

**PSYCHOLOGY:**—Latin; Mathematics (Algebra and Geometry, Trigo-  
nometry); French or German; and one of Physics, Zoology, Botany,  
Chemistry.

**MATHEMATICS:** { Latin; Mathematics (Algebra and Geo-  
metry, Trigonometry); Physics; and  
**MATHEMATICS AND PHYSICS:** { French or German.

**PHYSICS AND CHEMISTRY:** { Latin; Mathematics (Algebra and Geometry,  
Trigonometry); Physics or Chemistry;  
and French or German.

**PHYSICS:**

**BIOLOGY:**

**PHYSIOLOGY AND BIOCHEMISTRY:**

**BIOLOGICAL AND MEDICAL SCIENCES:**

**CHEMISTRY:**

**CHEMISTRY MINERALOGY AND**

**GEOLOGY:**

**GEOLOGY AND MINERALOGY:**

**SCIENCE (GENERAL):**

**HOUSEHOLD SCIENCE:**

**HOUSEHOLD ECONOMICS:**—Latin; Mathematics (Algebra and Geometry);  
two of English, French or German, Physics, Zoology, Botany,  
Chemistry; together with an additional subject; the candidate is  
recommended to take French or German and a science.

9. Candidates for admission to an Honour Course who have credit in  
Trigonometry and either Algebra or Geometry will be deemed to have  
fulfilled the requirements for admission in the two latter subjects. Such  
candidates cannot use their credit in Trigonometry to claim exemption  
also in Religious Knowledge or its equivalent.

10. A student may apply for admission to the First Year of an Honour  
Course if he has obtained complete standing in the Pass Course of the

\*A student may qualify for admission to the Second Year of this  
course by obtaining complete standing at the First Year examination in  
the Pass Course with an average of sixty-six per cent. in at least four  
subjects; for Philosophy sixty per cent is required instead of sixty-six.  
See sections 21 and 22.



First Year, and has met the entrance requirements of the Honour Course as laid down in the above Section, at either the First Year or Honour Matriculation Examination. The student's attention is drawn to the fact that standing in General Science of the First Year will not be accepted as the equivalent of credit at Honour Matriculation in a Science.

## II. MATRICULATION

11. The subjects of Pass Matriculation are: Latin, English, \*History, Mathematics and any two of the following—Greek, French, German, Spanish or Italian, Experimental Science or Agriculture. Two papers are set in each subject.

12. A candidate for Pass Matriculation will be allowed to write on one or more papers at a time in any order and on obtaining at least fifty per cent. of the marks assigned to any paper will be given credit for having passed in such paper.

13. The subjects of Honour Matriculation are: Greek, Latin, English, French, German, Spanish, Italian, History, Mathematics (Algebra, Geometry, Trigonometry), Physics, Chemistry, Biology (Botany, Zoology).

14. A candidate for Honour Matriculation will be allowed to write on one or more papers at a time in any order, and will be given credit for a subject on obtaining at least fifty per cent. in each paper of that subject, not necessarily at one examination.

15. Certificates of examinations recognized as equivalent in value to the Ontario Matriculation, Pass or Honour, may be accepted as far as they meet the Ontario requirements in subjects and percentages. A candidate applying for admission on such certificates must submit an official statement of the marks upon which these certificates were awarded.

16. The regulations respecting Matriculation together with a schedule of examinations which may be accepted as equivalent are to be found in the Curriculum for Matriculation.

## III. PROCEDURE FOR ADMISSION

### (a) GENERAL CONDITIONS

17. A candidate for admission should apply to the Registrar of the University for a form of application for admission; he is required to fill out this form and return it to the Registrar **not later than September 10th** together with the following: (a) all Pass and Honour Matriculation or equivalent certificates which he may hold; see Section 15; (b) any other evidence of ability to take the work proposed; (c) certificate of good character.

\*The two papers set in this subject cover British History and Ancient History respectively; for the latter paper Music may be offered as an option.

18. Each application for admission will be considered by the Committee on Admissions, and the candidate will be notified of their decision at as early a date as possible. **A candidate is strongly recommended to await the decision of the Committee before leaving for Toronto.**

(b) ENTRANCE AT THE FIRST YEAR

19. Applications for admission to the First Year will be considered from the following classes of students:

(a) The student who has obtained complete credit for the subjects of Pass and Honour Matriculation required for admission to the course which he desires to enter. See Sections 6, 8 and 10. Such a student when admitted becomes an UNDERGRADUATE in the Faculty of Arts.

(b) The student who presents other than Ontario certificates accepted by the University as covering the required subjects of Pass and Honour Matriculation. Such a student when admitted will be ON PROBATION and will not be allowed to enter the Second Year until he has passed in full the examination of the First Year; he will then be granted the standing of an undergraduate in the Faculty of Arts. For a list of equivalent certificates see the Matriculation Curriculum. See Section 34.

(c) The student who has not obtained complete credit for the subjects of Honour Matriculation required for admission to an Honour Course. Such a student, if admitted, will be ON PROBATION. See Sections 34, 35 and 36.

NOTE:—Applications will not be considered from students, except those mentioned in Section 18(d), who have not obtained credit for at least Pass Matriculation as required for admission to the Pass Course.

(d) The student of mature age who has not obtained complete credit for the required subjects of Pass and Honour Matriculation. Such a student, if admitted, will be ON PROBATION and will not be allowed to enter the Second Year until he has complied with all the conditions which the Council of the Faculty of Arts may impose. See Section 34.

(e) The student who is not proceeding to a degree in Arts, *i.e.*, an OCCASIONAL student. The application of such a student will be considered only when recommended by the staff in the department in which he wishes to enroll. Except by special permission of the Council an occasional student must pass the term and final examinations in a subject in which he may be enrolled before he can be allowed to enroll in that subject for the next higher year.

20. A student applying for admission to the First Year as an undergraduate must have completed the sixteenth year of his age on or before the first of October of the session in which he applies for registration. An occasional student must have completed the nineteenth year of his age on or before the same date.

## (c) ENTRANCE AT THE SECOND YEAR

21. For a statement of the conditions of admission to the Second Year for a student presenting Honour Matriculation certificates see Section 7, page 153.

22. The only courses open to a student entering on such certificates at the Second Year are the Pass Course, and, on conditions to be determined by the Council, the Honour Courses in Modern History, Political Science and Philosophy.

23. A student applying for admission to the Second Year as an undergraduate must have completed the seventeenth year of his age on or before the first of October of the session in which he applies for registration.

## (d) ADMISSION AD EUNDEM STATUM

24. An undergraduate of another University may be admitted *ad eundem statum* on such conditions as the Senate on the recommendation of the Council of the Faculty may prescribe.

25. An applicant for admission *ad eundem statum* must submit with his petition (1) a calendar of his University giving a full statement of the courses of instruction, (2) an official certificate of character and academic standing.

26. Such an applicant may not compete for scholarships at his first examination if admitted to a standing lower than that held in his own University, but, if he obtain standing at this first examination he shall subsequently enjoy all the rights and privileges of an undergraduate of this University.

## IV. REGISTRATION AND ENROLMENT

27. Every student in attendance proceeding to a Bachelor's degree in the Faculty of Arts is required to register in the University and to enrol in University College, or Victoria College, or Trinity College, or St. Michael's College.

28. Application for registration in the University, whether by mail or in person, should be made at as early a date as possible and **not later than September 10th**, and registration in the University together with enrolment in the College must be completed on or before September 27th, 1927. See Sections 17 and 18. **Neglect of early application will result in delay and inconvenience to the student.**

29. Enrolment with the instructors of the University and of the Colleges will begin at 9 a.m. on Saturday, September 24th, and must be completed by the student in person by 5 p.m. on Tuesday, September 27th, 1927.

30. After September 27th no student will be allowed registration for the whole or part of the session 1927-28, without the consent of the Council.

31. Every petition for registration for the Michaelmas Term subsequent to September 27th, 1927, must be accompanied by a sum of money reckoned at one dollar per diem for each day after September 27th. Similarly every petition for registration for the Easter Term subsequent to January 4th, 1928, must be accompanied by a sum of money reckoned at one dollar per diem for each day after January 4th. For sufficient cause the whole or part of such a sum may be refunded.

32. A student who has not enrolled in a subject or subjects on or before September 27th, may, at the discretion of the head of the department concerned, be refused admission to the classes or laboratories, until he shall have satisfied the head of the department that he is competent to proceed with the class. In order to qualify himself for admission such a student may be required to obtain tuition at his own expense.

33. A student of the First Year who has failed to obtain standing at the annual examination sufficient to admit him to the Second Year, will not be allowed to repeat the year unless special permission is granted by the Council, on the recommendation of his College; if such permission is granted the student will be on probation and will not be allowed to enter the Second Year until he has passed in full the examination of the First Year.

#### V. STUDENTS ON PROBATION

34. A student who has been admitted under Section 19 (b) or 19 (c) or 19 (d) or a student who, having failed to obtain standing, is permitted to repeat the First Year (see Section 33) will be admitted on probation only, and will be allowed to register for the Easter Term, only on the recommendation of his College after consultation with the staff in each of the subjects in which he is enrolled, and with the consent of the Council.

35. A student on probation admitted to the First Year of an Honour Course must obtain standing at the Pass examination of the First Year or at an equivalent examination in any subject in which his Honour Matriculation credits fall short of the prescribed entrance requirements, before he will be allowed to enter the Second Year.

36. A student admitted on probation to an Honour Course of the First Year will not be allowed by the Council to enroll in any subject beyond the requirements of his course except on the recommendation of his College and of the Department in which he is enrolled on probation.

#### VI. REGULATIONS RELATING TO STUDENTS IN ATTENDANCE

37. No student will be allowed to continue in attendance, whose presence is deemed by the Council of the Faculty to be prejudicial to the interests of the University.

38. Students proceeding regularly to the degree are required to attend the courses of instruction and the examinations in all subjects prescribed for students of their respective standing, and no student will be permitted to remain in the University who persistently neglects academic work.

39. Unless special permission is granted by the Council, a student who, at the close of two sessions in the University, has failed to secure standing in his year, will not be permitted registration in the Faculty of Arts.

40. The Students' Administrative Council has been entrusted by the Caput with supervision of the conduct of the students, and subject to the approval of the Caput, has power, through the Students' Court or otherwise, to deal with violations of the regulations governing conduct.

41. All interference on the part of any student with the personal liberty of another by arresting him, or summoning him to appear before any unauthorized tribunal of students, or otherwise subjecting him to any indignity or personal violence, is forbidden by the Caput.

42. No initiation ceremony involving physical violence, personal indignity, interference with personal liberty or destruction of property, may be held by the students of any Faculty or College of the University under the penalty of suspension or expulsion.

43. Any ceremony connected with the reception of the First Year desired by any Faculty or College must be prepared and carried out by a Committee of the Senior Year of the Faculty or College concerned, with the approval of a joint committee of the Caput and the Students' Administrative Council. The holding of such ceremonies except with this approval shall constitute a breach of discipline.

44. Any student who may be convicted of having taken part in a parade or procession through the city which has not been authorized by the police authorities after application by the Executive of the Students' Administrative Council, will be severely disciplined.

45. A student who is under suspension, or who has been expelled from a College or from the University, will not be admitted to the University buildings or grounds.

46. The constitution of every University society or association of students in the Faculty of Arts and all amendments to any such constitution must be submitted for approval to the Caput. All programmes of such societies or associations must, before publication, receive the sanction of the Caput through the President. Permission to invite any person not a member of the faculty of the University to preside at or address a meeting of any society or association must be similarly obtained.

47. The name of the University is not to be used in connection with a publication of any kind without the permission of the Caput.

48. Students of the Faculty of Arts, on the premises of Colleges or Faculties other than those in which they are registered, shall be subject to the regulations and penalties imposed by the administrative authorities of the premises concerned.

## VII. FEES

For the schedule of fees see page 184.

## VIII. PHYSICAL TRAINING

49. By order of the Board of Governors each male student proceeding to a degree must take Physical Training in the first and second years of his attendance. In each session in which Physical Training is compulsory he must first undergo a medical examination by the Director of the University Health Service and must then register for Physical Training at the office of the Athletic Association in Hart House. Students of all years who wish to take part in any form of athletics or physical exercise, must first undergo a medical examination by the Director.

50. Each woman student proceeding to a Bachelor's degree and enrolled in University College shall be required, during the first year of her attendance, to take Physical Training following upon an examination by the Medical Advisor for Women. The women students registered in Victoria, Trinity and St. Michael's Colleges are under the direction of their respective Colleges with respect to Physical Training.

51. The student who has failed to complete satisfactorily the course in Physical Training prescribed for the First Year, will not be permitted to register in the Third Year; and the student who has failed to complete satisfactorily the course in Physical Training prescribed for the Second Year, will not be permitted to register in the Fourth Year.

52. The student who has neglected to complete satisfactorily the course in Physical Training of the First or Second Year, must take this work during the Second or Third Year respectively of his course, and will be required to pay a supplemental fee of \$10 in addition to the prescribed Physical Training fee.

## IX. EQUIVALENT EXAMINATIONS—FIRST YEAR

53. Certificates of having passed the whole or a part of the following examinations may be accepted *pro tanto* for Pass Course subjects but not for the individual papers of a subject at the examination of the First Year or Senior Matriculation. Before exemption is granted on any of the certificates mentioned in this Section, a candidate may be required to satisfy the authorities of the University, and of his College, as to the equivalence of the examinations for which exemption is sought. See section 80 and footnote.

## PROVINCE OF ONTARIO

The Honour Matriculation Examination and the Upper School Examination or examinations of the same standard under other titles.

## PROVINCE OF NOVA SCOTIA

Grade XII Examination.

PROVINCE OF MANITOBA

Grade XII Examination.

PROVINCE OF BRITISH COLUMBIA

Senior Matriculation Examination.

PROVINCE OF ALBERTA

Grade XII Examination.

PROVINCE OF SASKATCHEWAN

First Class Diploma or Senior Matriculation.

NEWFOUNDLAND

Associate in Arts (Senior) Examination.

GREAT BRITAIN

The local Examinations for Senior students, conducted by the Universities of Oxford and Cambridge.

54. A candidate submitting any of the certificates mentioned in the preceding section must submit an official statement of the marks on which the certificate was obtained.

55. In view of the percentage required for standing in the Pass Course only those certificates which meet the conditions as to subjects and percentages will be accepted. Exemption will not be given in part of a subject of the First Year, e.g., credit in Geometry alone will not be accepted; a student must have passed in both Algebra and Geometry to be given exemption in Mathematics. See Section 9.

56. The Council will consider applications for the recognition of certificates other than those mentioned.

57. A candidate presenting *pro tanto* certificates is eligible for scholarships and for ranking in Honour Courses; but he is not eligible for grading in the Pass Course if he claims exemption in more than one subject.

## X. TEACHERS' COURSE FOR DEGREE

58. In order to assist teachers and others who desire to proceed to the degree of Bachelor of Arts, provision has been made for their instruction by 1, Teachers' Classes during the regular session, 2, (a) supervision during the academic year, and (b) the Summer Session.

59. Persons desiring to enter this course are required to present Upper School, Honour Matriculation, or equivalent certificates covering all or all but one of the subjects of the First Year as outlined in sections 7 and 21. The prescribed fee for entrance at the Second Year is \$15.

60. The Pass Course according to the following scheme will be the basis of instruction:

*Second Year*....English or Mathematics I, French, Science, History, Economics or Psychology.

*Third Year*....English, French or Mathematics I, Science, History, Economics or Ethics.

*Fourth Year*....English, French or Mathematics I, Science, History, Economics or History of Philosophy.

(The Science of these three years is made up of Botany, Zoology, Geology, Physics, Chemistry and Astronomy, which are of equal value and are offered two in each Session only one of which may be taken. The arrangement of this is as follows:

1927-1928: Botany or Astronomy

1928-1929: Geology or Physics

1929-1930: Zoology or Chemistry

A student who selects Mathematics, or Political Economy, or the Philosophical Group of subjects, must take the subject or group chosen throughout the three years, *i.e.*, the sequence provided by these subjects cannot be broken.)

61. The subjects of the Second Year are divided into two groups, which will be given in alternate years. The subjects for 1927-28 are English, French, Mathematics, Psychology, Botany, Astronomy.

62. The subjects of the Third Year are divided into two groups, which will be given in alternate years. The subjects for 1927-28 are English, History, Political Economy, Psychology, Botany, Astronomy.

63. The subjects of the Fourth Year for 1927-28 are English, French, Psychology, Botany, Astronomy.

64. These courses are open to persons actually engaged in teaching and to such others as have been approved by the Council. In all cases application for admission must be made to the Registrar of the University through the Director of University Extension. Only under exceptional circumstances will a candidate be allowed to attend classes in more than three subjects during one session of the Teachers' Course.

65. A student proceeding to the degree shall on or before *October 1st* of each year submit a statement of the work which he proposes to take (a) in the Teachers' Classes or (b) under supervision preparatory to the Summer Session, and on or before *May 15th* of each year, a similar statement of the work he desires to take during the Summer Session.

66. A student will receive credit for each subject in which he secures fifty per cent.

67. A student will not receive credit for a subject of a higher year until he has passed the examination of the lower year in the same subject. He may, however, be a candidate for examination in the work of two successive years in the same subject.

68. A student who has not been granted complete First Year standing may not enter upon the work of the Third Year, nor a student who has not been granted complete Second Year standing, upon the work of the Fourth Year.



69. Pursuant to Section 124 of the Revised Statutes of Ontario, 1914, in the case of a candidate for the degree of Bachelor of Arts, registered in the Teachers' Course, enrolment in one of the Arts Colleges shall not be necessary.

70. Instruction during the regular session will be given as far as possible to meet the convenience of the members of the classes residing in Toronto and its immediate vicinity. Instruction during the regular session is also provided, as far as possible, in other centres in the Province where a sufficient number of teachers, or others employed during the day, may be enrolled.

71. The Summer Session is held during July and a part of August, and is open (a) to persons engaged in teaching, (b) to such others as have been approved by the Council of the Faculty of Arts, and (c) to regular students who have failed to receive credit in one or at most two subjects of the Pass Course, provided always that instruction in such subjects has been arranged for at that Summer Session.

72. The work of the Second, Third, and Fourth Years of the Teachers' Course may be covered in five years and will involve (a) attendance on Teachers' Classes during four regular sessions or (b) attendance for four Summer Sessions and supervision during four regular sessions.

73. Instead of completing his course under this plan a candidate proceeding to the degree may attend the regular courses of instruction in the Fourth Year, in which case the fourth Summer Session is not compulsory. Students are advised to acquaint themselves with the regulations of the Department of Education respecting High School Assistants' certificates. See page 180.

74. A candidate will not be allowed to present himself for examination in any subject until he has attended one Summer Session and has had supervision of his work during one academic year, or until he has attended Teachers' Classes in that subject during one regular session or until he has completed the necessary minimum of attendance. See Section 72.

75. Supervision of work should precede the Summer Session, but as such supervision may follow class instruction, assistance in the work of either group of the Second Year or of the Third Year will be provided.

## XI. CONDITIONS FOR ACADEMIC STANDING

### CREDIT IN PASS SUBJECTS

76. To receive credit in a Pass Subject, a candidate must obtain at least fifty per cent. of the examination marks, as well as fifty per cent. of the aggregate of the term and examination marks in that subject; but where he has at one examination obtained an average of sixty per cent. of all the marks assigned to the Pass subjects of his annual examination, forty per cent. will (subject to the provisions of Section 103) be accepted in one or at most two of these subjects in lieu of the fifty per cent. required above.

77. At supplemental examinations fifty per cent. in each subject will be required, except in the case of a student permitted to write upon the entire examination of his year when Section 80 will govern.

78. In the First and Second Years a candidate who has failed to receive credit in one of a group of optional subjects may with the approval of the Council present himself at the supplemental examinations in any other of the alternative subjects, except in the case of those subjects in which term work is an integral part of the subject. In such a substitution, however, the candidate must, unless exempted by the Council, comply with all the conditions respecting term work, *i.e.*, there can be no transfer of term marks from the subject originally chosen to that substituted.

79. A successful candidate in a subject is graded as "A" or "B" or "C" or "Below the Line (B.L.)" according to the percentage obtained in the subject. For grade "A", a candidate must obtain at least seventy-five per cent., for grade "B", at least sixty-six per cent., for grade "C", at least fifty per cent. of the marks assigned to a subject, provided he has obtained at least fifty per cent. of the examination marks in the subject. For grade "B.L." he must obtain at least forty per cent. of the marks assigned to a subject together with an average of sixty per cent. of all the marks assigned to the Pass subjects of his annual examination.

#### STANDING IN THE PASS COURSE

80. A candidate will be granted standing at an annual examination, provided he obtains credit under Section 76 in at least four of the subjects proper to his year. At the examination of the First Year, however, a candidate who has \*exemption in one or two subjects must obtain credit under Section 76 in all or all but one of the remaining subjects.

81. A candidate who is required to take six subjects in the First Year, and who has failed in two of these subjects, must obtain credit for at least one of them before he can register in the Second Year.

82. A candidate must obtain complete standing in the First Year before he can register in the Third Year; and he must obtain complete standing in the Second Year before he can register in the Fourth Year.

83. A candidate who obtains an average of at least seventy-five per cent. of all the marks assigned to the †subjects proper to his year will be awarded Grade A standing in his course; a candidate who obtains an

\*Except under special circumstances and on the recommendation of his College, a student of the First Year may not claim exemption in more than two subjects, and so must attend lectures and write examinations in at least four subjects.

†In the First Year, students who write on four subjects only or less will not be graded in the Course.

average of at least sixty-six per cent. will be awarded Grade B standing; and a candidate who obtains an average of at least sixty per cent. will be awarded Grade C standing.

#### CREDIT IN HONOUR SUBJECTS

84. A candidate who is granted standing in any year of an Honour Course and who obtains at least seventy-five per cent. of the marks assigned to an Honour subject, will be awarded First Class Honours in that subject; similarly a candidate who obtains at least sixty-six per cent. will be awarded Second Class Honours, a candidate who obtains at least sixty per cent. will be awarded Third Class Honours, and a candidate who obtains at least fifty per cent. will be ranked as "Below the Line."

85. No candidate will be given credit in an Honour subject where term work is taken into account, unless he obtain at least fifty per cent. of the marks at the May examination, as well as fifty per cent. of the aggregate of the term work and examination marks in that subject.

86. A candidate who fails to obtain fifty per cent. in an Honour subject, may be granted pass standing therein.

#### STANDING IN HONOUR COURSES

87. In order to secure standing in the First, Third or Fourth Year of an Honour Course, a candidate must have obtained (a) at least fifty per cent. in each Honour subject of the course as well as (b) credit as defined in Section 76 in all, or all but one of the Pass subjects attached thereto.

88. In order to secure standing in the Second Year of an Honour Course, a candidate must have obtained (a) at least fifty per cent. in each Honour subject of the course together with an average of at least sixty per cent. in such Honour subjects, as well as (b) credit as defined in Section 76 in all or all but one of the Pass subjects attached thereto. In the Session 1928-1929 this regulation will be extended to include the Third Year, and in the Session 1929-1930 the Fourth Year.

89. A candidate in the Second Year who obtains at least fifty per cent. in each Honour subject of the course but fails to obtain an average of sixty per cent. in such Honour subjects, will be transferred to the Third Year of the Pass Course without conditions, provided he has obtained credit in all of the Pass subjects attached to the Honour Course. Such a candidate may accept the transfer or may repeat the Second Year and again compete for Honours.

90. A candidate of the First or Second Year who fails to secure an average of fifty per cent. in an Honour Course may be transferred to the Pass Course on such conditions as the Council may impose. Such a candidate may accept the transfer or may repeat the year and again compete for Honours.

91. A candidate in an Honour Course of the Third Year who fails to secure standing must repeat the Year, unless he be transferred to the Pass Course by the Council on the special report of the Board of Examiners.

92. A candidate in the Fourth Year who fails to obtain standing in his Honour Course may on recommendation of the examiners be awarded a Pass degree. Such a candidate may accept the award or may repeat the year and again compete for Honours.

93. In the Session 1928-1929 a candidate in the Third Year who fails to obtain an average of sixty per cent. in the Honour subjects of his Course, will not be granted standing in the year, and if he desires to proceed with his Honour Course must repeat the year and again compete for Honours.

94. In the Session 1929-1930 a candidate in the Fourth Year who obtains at least fifty per cent. in each Honour subject of the course, but fails to obtain an average of sixty per cent. in such Honour subjects, will be granted a Pass degree. Such a candidate may accept the award or may repeat the year and again compete for Honours.

95. A candidate, who has fulfilled the conditions of Section 87 or of Section 88, will be awarded First Class Honours in order of merit provided he has obtained an average of seventy-five per cent. of all the marks assigned to the Honour subjects of his course; such a candidate will be awarded Second Class Honours in order of merit provided he has obtained an average of at least sixty-six per cent.; such a candidate will be awarded Third Class Honours provided he has obtained an average of at least sixty per cent.; and, except in the Second Year, such a candidate will be ranked as "Below the Line" provided he has obtained less than sixty per cent.

96. A candidate in an Honour Course, who has failed in two Pass subjects, will have his standing deferred both in the Honour Course and in the individual subjects thereof until he has passed in both Pass subjects; he will be debarred from registration and enrolment in the higher year until he has passed in at least one of these and has fulfilled the conditions of Section 98.

97. A candidate in an Honour Course will not be granted standing in his year if he fail in more than two Pass subjects.

98. A candidate must obtain complete standing in the First Year before he can register in the Third Year; and he must obtain complete standing in the Second Year before he can register in the Fourth Year.

#### TERM WORK

99. In the Pass Course, reports on the term work of every student proceeding to a degree will be made in all the subjects of each year, except in purely lecture courses where the Council, on the recommendation of the teaching staff, may have approved the omission of such reports.

100. The marks for term work in a subject of the Pass Course will be determined in the manner considered most suitable by the teaching staff in that subject.

101. In all subjects of the Pass Course, the ratio of term marks to examination marks will be as fifty to one hundred, except in English where the ratio is as one hundred to one hundred.

102. When a candidate fails to secure credit in a Pass subject, other than English or a Science of the Second, Third and Fourth Years, because of a deficiency in term marks he must either (1) earn a new term mark under conditions to be determined by the staff in the subject, and repeat the examination or (2) make up the deficiency of term marks by obtaining a corresponding increase in his examination marks.

103. A candidate whose term work in English is deficient, or who obtains less than fifty per cent. of the marks assigned to the term work in any one of the Pass Sciences of the Second, Third and Fourth Years must obtain a satisfactory term mark under conditions to be determined by the staff concerned, and subsequently must pass a supplemental examination in the subject.

104. In the Honour Courses, reports in term work will be made wherever such work is specified as a part of the course.

105. In an Honour Course, the ratio of term marks to examination marks in a subject will be determined by the staff in that subject.

106. A term examination shall not, unless it be so specified in the calendar, take the place of the Annual Examination in May on any portion of the prescribed work of an Honour Course.

107. A student who has failed to obtain standing at the May examination and who is repeating his year, must repeat the term work in each subject of his course unless, under exceptional circumstances, he be exempted from part or all of such term work by the Council on the recommendation of his College and of the Department or Departments concerned.

#### CONDITIONS OF ENTRANCE TO THE VARIOUS YEARS

108. In order to proceed in an Honour Course in the Second Year a candidate at the examination of the First Year (1) must have fulfilled the conditions of Section 87, (2) must, if his standing is deferred, have fulfilled the conditions of Section 96, and (3) in the case of a student on probation must have fulfilled the conditions of Section 35.

109. In order to proceed in an Honour Course in the Third Year, a candidate at the examination of the Second Year (1) must have fulfilled the conditions of Section 87, (2) must have complete First Year standing, and (3) must, if his standing is deferred, have fulfilled the conditions of Section 96.

110. In order to proceed in an Honour Course in the Fourth Year, a candidate at the examination of the Third Year, (1) must have fulfilled the conditions of Section 87, (2) must have complete Second Year standing, and (3) must, if his standing is deferred, have fulfilled the conditions of Section 96.

#### REPEATING THE YEAR

111. A student who has been granted standing in any year of the Pass Course may on conditions to be determined by the Council repeat that year in an Honour Course, and on obtaining standing, may proceed therein. See Section 10.

112. A candidate in any course who for any cause is debarred from the higher year, may repeat the whole examination in the following May, but is not eligible for scholarships, medals, or prizes.

113. The student who has failed to obtain standing at the May examination and who desires to repeat his year, is referred to the following sections—33, 34, 39 and 107.

#### XII. EXAMINATIONS

114. No candidate will be admitted to examination unless the Head of the College in which he is enrolled certifies that he has complied with all the requirements of that College affecting his admission to such examination.

115. A candidate will not be admitted to an examination unless he has paid all the fees due from him. A candidate who fails to pay his examination fees on or before March 1st—the last day for receiving fees prior to the May examination—must pay an additional fee of one dollar.

116. A candidate who fails to send his "application for examination" by the day appointed for receiving such applications must pay an additional fee of one dollar.

117. No candidate in a course involving practical work in a laboratory will be admitted to examination if the Professor under whom his work is carried on reports that he has neglected his laboratory work or signally failed in the practical examinations.

118. Representations on the part of candidates with regard to the May examination and applications for consideration on account of sickness, domestic affliction, or other causes, must be filed with the Registrar before May 24th. In the case of the September examination such applications must be filed with the Registrar before the close of the examination.

## THE MAY EXAMINATION

The May examination is held at the University and is open to all of all the Years in the Pass Course and in all the Honour

arrangements will be made, whenever possible, to allow a graduate, engaged in teaching in Ontario and who desires to receive credit in not taken during his undergraduate course, to take such examinations in his own locality.

if the time-table permits, a candidate may present himself for examination in subjects in which he has previously failed to receive credit.

In the case of Fourth Year candidates, where there is a conflict in timetables, a special supplemental examination may be arranged.

A candidate for examination is required to send an application, on a printed form, to the Registrar not later than March 1st.

## THE SEPTEMBER SUPPLEMENTAL EXAMINATION

The September Supplemental examination is held at the University, and is open (1) to candidates who obtained standing at the May examination but who failed in one or, in some cases, two Pass subjects, (2) to candidates in the Fourth Year of the Pass Course who failed to obtain standing in May, and (3) to candidates in any year of the Pass Course who were prevented by sickness, domestic affliction or other causes beyond their control, from attending the May Examination. The last mentioned candidates must prove to the satisfaction of the Council the sufficiency of the cause of absence not later than June 15th.

Wherever practicable this supplemental examination will be held at Winnipeg, Saskatoon, Edmonton, Calgary and Vancouver. The candidate who is to take such an examination is held must meet the expenses incurred and must make early application for the privilege.

A candidate for this examination is required to send an application, on a printed form, to the Registrar not later than August 1st.

## GENERAL INFORMATION

### THE UNIVERSITY AND THE COLLEGES

In the Faculty of Arts of the University there are four Colleges: University College, Victoria College, Trinity College and St. Michael's College; and every student registered in the Faculty must enroll in one of these Colleges.

Each College gives instruction to its students in the following subjects: Greek, Latin, Greek and Roman History, Oriental Languages, Ancient Oriental History, English, German, French, Ethics and \*Religious Knowledge. Instruction in the remaining subjects of the curriculum—Italian, Spanish, Modern History, Political Economy, Law, Philosophy, Psychology, Mathematics, the Sciences, World History and Military Studies—is given by the University.

The annual examinations are conducted by the University, which also grants academic standing upon the results of these examinations and confers the degree upon the successful completion of a prescribed course of study.

### THE LIBRARY

The University Library is contained in a building of its own, situated on the east side of the campus that lies to the south of the Main Building. All students who have paid a library fee to the Bursar of the University are entitled to the privileges of the Library. Besides Reading Rooms the building contains Departmental Studies, which may be used as study-rooms by honour students in the various branches in which the Professors hold seminary courses, and private studies, intended for members of the Faculty or advanced students engaged in research work. The Library is opened at 8.45 every morning and remains open until 10 at night during the academic term. Books in ordinary use may not be taken out of the building during the daytime, but are lent for the night toward 5 p.m., to be returned the following morning before 10 o'clock. Books not in general demand may, on application, be borrowed for a longer period. Failure to return a borrowed book at the proper time and other breaches of the regulations are punishable by fine or suspension from the privileges of the Library.

---

\*In University College, courses in Biblical History and Literature, given by the Staff in Oriental Languages, are prescribed in place of Religious Knowledge.



## ROYAL ONTARIO MUSEUM

## ARCHAEOLOGY, GEOLOGY, MINERALOGY, PALAEONTOLOGY, ZOOLOGY

Students of the University in all departments are recommended to avail themselves of the privileges of the Museum, which, although under separate control, is intimately connected with the work of the University.

The Museum is open on all week days from 10 a.m. to 5 p.m., Sundays 2 to 5 p.m. The Admission is free to the public on Tuesday, Thursday, Saturday and Sunday. On other days an admission fee of fifteen cents is charged.

By a resolution of the Board of Trustees all regular students of the University may be admitted free on all days of the week by presenting their card of registration.

## HART HOUSE

Hart House, the gift of the Massey Foundation, is so called in memory of Mr. Hart Massey. In its widest interpretation it seeks to provide for all the activities in the undergraduate's life apart from the actual work in the lecture room. It affords all the facilities of a first-rate club. In the beauty of its architecture and the various functions which it performs it is unique on this continent.

Hart House contains completely equipped club rooms, including common rooms, reading room, music room, lecture room, sketch room, photographic dark rooms, the Great Hall, which is the students' dining hall, a small Chapel, rooms reserved for religious organizations in the University, gymnasium, squash courts, swimming pool, running track, rifle range, billiard room, library and Hart House Theatre.

Hart House is open from 8.00 a.m. to 11.00 p.m. daily and meals are served in the Great Hall throughout the academic year. Members are entitled to full privileges of all rooms in the building between these hours and the use of the gymnasium, pool, showers and locker rooms until 6.30 p.m. each day, except Sunday, subject to the regulations of the Athletic Association.

The Library contains a good selection of books of general interest. These books must not be taken from the room.

Sunday Evening Concerts are given by the leading musicians of the city at 9 p.m. in the Great Hall on certain Sundays during the session and music recitals take place at 5 p.m. every Friday in the Music Room.

The Sketch Room is equipped with facilities for drawing and painting. Weekly drawing and painting classes are given by a qualified instructor and frequent exhibitions of pictures and lectures on Art are arranged.

A group of rooms is set apart for the use of the Faculty Union. A dining room and a common room are also reserved for Graduate Members. Six bed-rooms are available for the use of guests, at a reasonable charge.

The Warden is entrusted with the general supervision of the whole house in co-operation with the following committees: House, Hall, Library, Music, Billiard, Sketch, Camera and Squash. These committees consist of two senior members, a graduate member, the Warden and a full representation of undergraduates. The undergraduates are elected annually by their fellow students. The Board of Stewards is the Senior Committee and has final control of the House, being directly responsible to the Board of Governors. It consists of the Warden (ex-officio chairman) and representatives of the President of the University, the Board of Governors, the Faculty Union, the Athletic Association, the Graduate Members, the Student Christian Association, the Students' Administrative Council and the undergraduate secretaries of all Standing Committees.

All male undergraduates proceeding to a degree in the University are members of Hart House. The annual fee of \$8.00 covers all fees in connection with Hart House and membership in the Athletic Association for the academic year (September to May). Membership Cards may be obtained at the Warden's Office on presentation of the Bursar's receipt for fees paid.

Hart House has no endowment whatsoever and is entirely dependent for its upkeep on the fees received from graduates and undergraduates and from various sources of revenue in the House itself.

Other male students in the University, or students in the affiliated or federated institutions receiving instruction in the University, may become members of Hart House on payment of the required fee at the Warden's office.

Graduates are entitled to the full privileges of Hart House on payment of an annual fee of \$10.00. Out-of-town graduates may become members on payment of an annual fee of \$2.50.

#### HART HOUSE THEATRE

Hart House Theatre is a Repertory Theatre existing to promote the interests of dramatic art in the widest sense. Its performances are open to members of the University and to the general public. The Theatre is operated by a Board of Syndics, who are responsible to the Governors of the University for its administration. It is the policy of the Syndics to permit the use of the Theatre by those recognized dramatic societies within the University which are endeavouring to do serious work.

#### UNIVERSITY COLLEGE WOMEN'S UNION

79 ST. GEORGE STREET

Dean of Women and Head of the Union, Mrs. M. M. Kirkwood, Ph.D.  
Secretary, Miss M. S. R. Boyd, B.A.

The Union contains common rooms, library and reading room, dining hall, rest room, and guest rooms for the use of members.

**MEMBERSHIP**—All women undergraduates of University College are members of the Union. Graduates may also belong. (For membership fee see Fees.)

**MEALS** are by flat rate or ticket.

Flat rate per week (payable in advance by the term).....	\$5.00
Breakfast 35cts. or 5 tickets.....	1.75
Luncheon 35cts. or 5 tickets.....	1.25
Dinner 35cts. or 5 tickets.....	1.75

**REGISTRATION**—All women undergraduates in University College are required to register with the Dean at the beginning of term.

**BOARDING HOUSES**—Women undergraduates who are away from home and not living in a College residence or Argyll House must have their boarding houses approved by the Dean. Students who need boarding houses are asked to communicate with her by letter after September 1.

### VICTORIA COLLEGE WOMEN STUDENTS' UNION

"Wymilwood", Victoria College Women Students' Union, 84 Queen's Park, the gift of Mrs. E. R. Wood and Lady Flavelle, provides beautiful Common Rooms for the women students of the College, and is the centre of their intellectual and social activities. There are the following rooms—Library, Music Room, Reception Rooms, Refectory, Gallery, Foyer, and Office. These rooms are available for committee meetings, discussion groups, class receptions, etc. The Women's Undergraduate Association works with the Head of the Union regarding rules and regulations for the use of the rooms.

Meals will be served in the Refectory.

The Union fee is \$10.00, to be paid to the Accountant of the College.

Alumnae may be members of the Union.

For further information please apply to the Head of the Union, "Wymilwood", 84 Queen's Park.

## RESIDENCES

### UNIVERSITY OF TORONTO

#### RESIDENCE FOR MEN

By the generosity of the late E. C. Whitney, Esq., Mrs. Whitney and friends, the University offers to one hundred and fifty men the advantages of residential life and excellent accommodation within its own grounds. The Residence consists of three Houses situated on the north side of Hoskin Avenue, opening upon a quadrangle, the fourth side of which is formed by Devonshire Place. They stand about two hundred yards to the north of University College and close to Hart House. The buildings are known as the South, East and North Houses.

Each House contains twenty-four single rooms, one single suite, and eleven suites, a suite comprising a study and two bedrooms. Two large

rooms in each building, each with an open hearth, have been set aside as common rooms. A lavatory with hot and cold shower baths is provided for every eight men. The buildings are heated by steam and lighted by electricity.

The University supplies the table, chairs, book-case, chiffonier, bed, mattress, pillows, linen and window shades for each room; it is prepared to furnish a desk-lamp for a nominal rental.

The rates are \$4.00 per week for a single room or half of a suite, and \$5.00 per week for a single suite. The rent is payable as follows: for the Michaelmas term, when the key is issued; for the Easter term up to April 1st, at the opening of the Easter term; for the remainder of the Easter term, April 1st. These charges cover heat, light, house-service and house-laundry. To cover local telephone service each student in residence will be required to pay the Bursar an annual fee of \$2.00. There is no separate dining hall connected with the Residence, but board may be obtained at the adjacent University Dining Hall in Hart House.

Except under very special circumstances occupants who withdraw at any time during the session will be required to pay the full rent up to April 1st.

Applications for rooms must be made in writing to the Secretary of the Residence Committee (address the Registrar's Office) and must be accompanied by a deposit of \$5.00. This deposit will be returned if the application is not granted, but will be forfeited if a room is assigned to the applicant and not taken by him, unless notice of his refusal of the room is received by the Secretary in writing before September 15th. It will be returned in full at the end of the College year if the room key is given back and the room and furniture left in a satisfactory condition. The following principles govern the allotment of rooms: (i) No student, who as a result of the annual Spring examinations is not assured of being able to proceed to a subsequent year, will be admitted into the Residence. Exception to this rule will be made in the case of a student in the Faculty of Medicine who has obtained standing at the May examination, but is debarred by the rules of that Faculty from proceeding to the subsequent year until he has passed his Supplemental examinations. Such a student will be assigned a room provisionally, but cannot occupy it unless he passes his Supplemental examinations in September. (ii) The rooms in each house will be distributed among the various Faculties and Years. (iii) A limited number of rooms will be reserved for members of the incoming First Year until September 12th. (iv) Applications will be considered in order of priority.

The University lays down three general rules, designed to prevent hazing, the use of intoxicants and gambling. The students in each House shall elect a House Committee, which is entrusted by the University with the making and enforcing of any other needed rules and with the maintenance of order. A member of the Faculty resides in each House to act as friend and adviser to the men in residence.

UNIVERSITY COLLEGE  
RESIDENCE FOR MEN

This residence is situated at 73 St. George Street, immediately to the west of the College. It contains, besides spacious common rooms, accommodation for approximately thirty-two men. The rental is \$4.00 a week, payable for the Michaelmas term, when the key is issued; for the Easter term till April 1st, at the opening of term; for the remainder of the Easter term, on April 1st. This charge covers all the services provided by the house, except telephone service. To cover local telephone service each student in residence will be required to pay the Bursar an annual fee of \$2.00. Occupants may secure their meals in the Great Hall of Hart House, at a cost of approximately \$6.00 per week.

The College authorities are anxious that the residence should be maintained at the highest possible standard, and therefore offer special reduced terms to any of the following: (a) holders of University and College scholarships; (b) those who at the last annual examination have obtained First-Class standing in an Honour Course or Grade A in the Pass Course.

Applications for admission should be accompanied by a deposit of \$5.00 caution-money, and addressed to the Dean of Residence, University College.

## RESIDENCES FOR WOMEN

Applications for rooms in the University College residences for women listed below must be made in writing to the Dean, Mrs. M. M. Kirkwood, 79 St. George Street, the applicant expressing her preference as to particular residence. Each application must be accompanied by a deposit fee of \$5.00, which will be refunded if the application is not granted, or if it is withdrawn before September 15th. The deposit fee will be returned at the end of the College course if the room is left in good condition and there are no breakages.

Applications from First Year students will be considered first. Re-entry into residence depends upon satisfactory academic work on the part of the applicant.

To cover local telephone service each student in residence will be required to pay the Bursar an annual fee of \$2.00.

*Queen's Hall, Nos. 4, 7, 9 Queen's Park*—Dean in Residence: Miss C. F. Valentine, M.A.

Accommodation is provided for 98 students. The rate for room and board is \$9.50 per week for the 32 weeks of the academic year, and the dues must be paid to the Bursar in advance by the month or term.

*Hutton House, 94 St. George St.*—Resident Head: Miss E. Harris, M.A.

This residence, accommodating 38 students, is connected with the University College Women's Union. The rate for rooms is \$4.00 to \$5.00 a week for the 32 weeks of the academic year, payable to the Bursar in advance by the month or term. Meals are taken at the Union, the rate being equivalent to \$5.00 a week.

*Argyll House, 100 Queen's Park*—Resident Head: Mrs. L. Howard.

Accommodation for some 15 undergraduate women of University College is offered by Argyll House. The rate for rooms is \$4.00 per week for the 32 weeks of the academic year, payable to the Bursar by the month or term. Meals are taken at the Union, the rate being equivalent to \$5.00 a week.

### VICTORIA COLLEGE

#### THE RESIDENCE FOR MEN

There is accommodation in the four houses of the Residence for 134 undergraduates of Victoria College. Each room is completely furnished as a combined study and bedroom. About 15 rooms have fireplaces. There is a Common Room in each House. The rates for the session for men in Residence for room and meals are from \$264.00 to \$296.00. The Dining Hall, known as Burwash Hall, is mainly for the use of students of Victoria College, but there is accommodation for a limited number of men from other Colleges and Faculties. Students, other than those in Residence, may buy individual meal tickets, strips of tickets or board at a weekly rate. West House, 75 Queen's Park, is used as an Annex of the Men's Residence and has accommodation for 21 students. All students in Residence, including West House, are required to take their meals in Burwash Hall. Applications for rooms and all inquiries should be addressed to the Accountant, Victoria College.

#### RESIDENCES FOR WOMEN

The women students of Victoria College are housed in six buildings—Annesley Hall, Wymilwood, the Annex, Oaklawn, New House and Rice House, accommodating approximately sixty-six, thirty, twenty-seven, twenty-six, eleven and twelve students respectively. The houses are all near the College.

Applications for rooms must be accompanied by a deposit fee of \$10.00, which will be refunded if the application is withdrawn before September 1st. Fees for the year range from \$265 to \$400, according to the location of the room, and are payable half on October 1st and half on February 1st.

Additional fees are:—medical examination \$3.00; nurse's fee \$10.00; use of laundry \$2.00. These charges are subject to change.

For further information kindly write to the Dean of Women Students, Victoria College, Queen's Park, Toronto.

### TRINITY COLLEGE

Trinity, the Church of England College in the Federation, provides residence facilities for both men and women students.

#### RESIDENCE FOR MEN

Excellent accommodation for about 130 men is found in Trinity House, on the corner of St. George and Harbord Sts., close to the Main Building of the College. The students' living rooms are so arranged that two students may room together, or a student may have a room to himself, as may be preferred. Details as to fees for room and board, which are maintained at the lowest rate consistent with first class service, will be sent on request.

Applications for rooms in College are to be made on a printed form provided for this purpose, and are received at any time after January 1st for the succeeding Michaelmas Term, being subject to withdrawal on written notice up to September 1st. Most of the rooms, being furnished partly by the College and partly by the occupants, may be fitted up to suit the taste of the individual student. Further information, with blank forms of application, will be supplied on request being made to "The Registrar, Trinity College, Toronto".

#### RESIDENCE FOR WOMEN

Excellent accommodation is provided in St. Hilda's College on St. George St. within easy reach of the Main Building.

For information as to fees and academic qualifications for admission, also for blank forms of application, address "The Registrar, Trinity College, Toronto". Applications for residence are referred by him to the Principal, St. Hilda's, but no applications for residence can be accepted until the academic qualifications have been submitted to the Registrar.

#### ST. MICHAEL'S COLLEGE

For Catholic students St. Michael's now offers all the advantages peculiar to a Catholic College.

#### RESIDENCE FOR MEN

There is accommodation for the men at St. Michael's College. Parents are most careful of the dangers and temptations to which students, away from home for the first time, are subjected. This is a point that St. Michael's chiefly considers, and she is in a position almost to guarantee that the student will be as safe in every way as if he were in his own home, in addition to receiving all the advantages of the University.

The residents are subjected to a reasonable rule with a view to careful supervision, and a solid moral and religious training. Constant and intimate intercourse between staff and student is a feature.

The health and development of body and mind is promoted by regulated hours of study and recreation. Opportunity is given for all kinds of athletic exercise. For terms and application, address "The Superior".

## RESIDENCE FOR WOMEN

For women students, St. Joseph's Convent, St. Alban's Street, and Loretto Abbey College, 385 Brunswick Avenue, are providing residences to meet in every way the wishes of all. Address "The Superior".

## STUDENTS' ADMINISTRATIVE COUNCIL

The Students' Administrative Council has been entrusted by the Caput with supervision of the conduct of the students, and has power subject to the approval of the Caput, to deal with violations of the regulations governing conduct.

Any student who may be convicted of having taken part in a parade or procession through the city which has not been authorized by the police authorities after application by the Executive of the Students' Administrative Council, will be severely disciplined.

## WOMEN STUDENTS' ADMINISTRATIVE COUNCIL

The Women Students' Administrative Council is the representative organ of the women students of the University of Toronto and aims to coördinate all intercollegiate activities. It consists of representatives from all colleges and faculties.

## THE JOINT EXECUTIVE, STUDENTS' ADMINISTRATIVE COUNCILS

The Joint Executive, Students' Administrative Councils, comprising the Executives of the Students' Administrative Council and the Women Students' Administrative Council, assumes financial responsibility for the publication of *The Varsity* and *Torontonensis*. The annual fee of \$4.00 paid by all undergraduates proceeding to a degree provides for the year's subscription to *The Varsity* and entitles the student to a copy of *Torontonensis* on graduation.

## THE ATHLETIC ASSOCIATION

University athletics for men are under the entire control of the University of Toronto Athletic Association, of which the executive body is the Athletic Directorate. This consists of:

- The President of the University,
- Two members of the faculty, appointed by the President,
- Two graduates, appointed by the Athletic Advisory Board,
- The Medical Director and the Financial Secretary (*ex-officio*),
- Five undergraduates, elected annually,
- An undergraduate representative, appointed by the Executive of the Students' Administrative Council.



The Directorate alone has the power to sanction the use of the name "The University of Toronto" in connection with men's athletics, and no men's athletic event can be held in the University without its approval. It has control of the athletic field, the gymnasium, the swimming pool, and other conveniences in connection with athletics in Hart House, and is empowered by the Board of Governors to make the necessary arrangements to effect the carrying out of the University regulations requiring Physical Training for men.

### WOMEN'S ATHLETIC ASSOCIATION

University athletics for women are under the entire control of the University of Toronto Women's Athletic Association, of which the executive body is the Women's Athletic Directorate. This consists of:

The President of the University,

Two women members of the faculty, appointed by the President,

Two women graduates, elected by the Women's Athletic Advisory Board,

The Medical Advisor for Women, the Physical Directress, and the Financial Secretary (*ex-officio*),

Five undergraduates, elected annually.

The Directorate alone has the power to sanction the use of the name "The University of Toronto" in connection with women's athletics, and no woman student may participate in any athletic event during the academic year without its permission. The Medical Advisor for Women and the Physical Directress are authorized to arrange for such Physical Training for women as is required by the University.

### CANADIAN OFFICERS TRAINING CORPS

The Toronto Contingent of the Canadian Officers Training Corps was organized in 1914, and is a unit of the non-permanent Active Militia. Its primary object is to provide students at Universities with a standardized measure of military training with a view to their qualifying for commissions in the country's auxiliary forces. C.O.T.C. certificates of qualification exempt their holders from examination for commissioned rank on joining a Militia unit in Canada, or, if resident in the British Islands, render them eligible for commissions in the Army Reserve of Officers, the Militia, or the Territorial Army.

The facilities which are offered by the contingent for obtaining a qualification while at the University are intended to enable young gentlemen to give personal service to their country with the least possible interference with their civil careers, to ensure that units have their establishments complete in the junior commissioned ranks, and to build up an adequate reserve of scientifically trained officers who have completed a period of consecutive and systematic military training, on academic lines, of a nature calculated to produce good officers.

The contingent provides the practical work for students taking the Military Studies option for the Arts degree, as also physical exercise for students who may choose this as the form in which they will take their compulsory Physical Training. In addition to service in the corps for a University credit, students of any year or faculty are trained in it to qualify for officers' certificates in the Infantry, Artillery, Engineers, Army Medical Corps and Signallers, writing on the examinations set by the War Office for members of O.T.C. contingents throughout the Empire.

There are at present four companies—in the Faculties of Arts, Medicine and Applied Science—and the training of each is so arranged that on leaving the University students are qualified for commissions in that branch of the Militia to which their University course particularly applied.

The present Headquarters are at 184 College Street, and include armouries, members' reading room, library and lecture rooms.

The Contingent's Staff is:—

*Officer Commanding*, LT. COL. T. R. LOUDON.

*Second in Command*, MAJOR J. R. COCKBURN, M.C.

*Company Commanders*:

MAJOR H. H. MADILL

MAJOR W. G. COSBIE, M.C.

CAPT. W. J. T. WRIGHT, M.B.E.

*Adjutant*, LIEUT. F. W. BERTRAM.

*Paymaster*, CAPT. T. A. REED.

*Contingent Sergeant-Major*, S.-M. W. HUNT, late Royal Welsh Fusiliers.

For particulars of courses in Military Studies see page 304.

## ACADEMIC STANDING FOR HIGH SCHOOL ASSISTANT'S CERTIFICATE

The Department of Education of Ontario has approved the following regulations with respect to the academic standing necessary for admission to the Course for a High School Assistant's Certificate in the Ontario College of Education:

### I. ORDINARY HIGH SCHOOL CERTIFICATE

A candidate for admission shall submit with his application his certificate of graduation as Bachelor or Master of Arts, Bachelor or Master of Science, Bachelor of Commerce, Bachelor of Agriculture, or Bachelor of Applied Science, from a British university, after a regular university course approved by the Minister of Education as to entrance requirements and as to content of the undergraduate courses. Each applicant must have Upper School or Honour Matriculation standing in English and History and Mathematics or the equivalent of such standing.

## II. HIGH SCHOOL SPECIALIST'S CERTIFICATE

Subject to the conditions specified below, the academic standing for admission to the courses leading to High School Specialists' certificates in Classics, English and French, English and German or Spanish, French and German or Spanish, English and History, Mathematics and Physics, Science, and Household Science is an Honour degree in Arts from any one of:—the University of Toronto, Queen's University, McMaster University, and the Western University.

1. The courses in the departments specified above shall be the Honour courses as defined in the calendars of the respective Universities for the year 1926-27. After due notice from any one of the four Universities, the Minister may accept modifications of its courses for Specialist standing.

2. Honour degrees in Arts from other British Universities on courses which are deemed to be the equivalent of those prescribed in the calendars of the four Ontario Universities may be accepted for Specialist.

3. The courses shall extend over at least five years from Pass Matriculation or, as may be determined under the regulations of the University concerned, over four years from Honour Matriculation.

4. Candidates shall attend for at least two full academic years. Under the direction of the University they may substitute for one of those years, at least two Summer Sessions.

5. The standard for each year shall be that prescribed by the University for candidates taking Honour courses, with the additional provision that in the final Honour work of the department in which specialist standing is sought, the standard shall be at least Second Class Honours (sixty-six per cent.).

6. The Minister shall have authority to deal with any case not covered under the above. Each University shall submit to the Minister a recommendation on any case whose merits justify special consideration.

The University, with the approval of the Department of Education, issues a pamphlet containing a detailed statement of the academic requirements for Specialists' Certificates and Inspectors' Certificates. A copy of this may be obtained on application at the Registrar's Office, Simcoe Hall.

## THE PEARSON KIRKMAN MARFLEET LECTURESHIP

In November, 1910, Mrs. Lydia A. Marfleet, of Prophetstown, Illinois, gave the sum of \$5,000 to found a lectureship in the University of Toronto, to be called, in memory of her late husband, the Pearson Kirkman Marfleet Lectureship.

The Governors accepted the trust, and have established and agreed to maintain the lectureship in perpetuity.

The Governors have undertaken to appoint at least once in every four years some person or persons to deliver a course of lectures in the University of Toronto on this foundation; and as the late Pearson Kirkman Marfleet, an American citizen, devoted constant thought to the public welfare of his own country, and also watched the growth of the Dominion of Canada with profound interest, the Governors have further undertaken that such person or persons as may from time to time be appointed shall, as far as possible, be chosen with regard to their special ability to set forth some phase or phases of the national movements of each or both countries.

Courses of lectures under this foundation have been delivered by the following: The Honourable William Howard Taft, Ex-President of the United States, February 10th, 11th and 12th, 1915; The Right Honourable Sir Robert Borden, P.C., G.C.M.G., LL.D., October 5th, 6th and 7th, 1921; The Honourable John Bassett Moore, November 2nd, 3rd and 4th, 1925.

#### UNIVERSITY OF OXFORD

Any person who has obtained the degree of Bachelor of Arts or Master of Arts at the University of Toronto may be admitted to the status and privileges of a Senior Student in Oxford University; provided that he shall have pursued at this University, or, should the Hebdomadal Council in his case so approve, at more than one University, a course of study extending over three years at least.

Any student at the University of Toronto who shall have pursued at this University a prescribed course of study extending over two years at least, may be admitted to the status and privileges of a Junior Student in Oxford University; provided that his course of study and the standard attained by him in any examinations proper to such a course shall have been approved by the Hebdomadal Council. No course shall be approved for the purposes of this paragraph which does not include the study of two languages other than English, of which languages one shall be either Latin or Greek.

#### UNIVERSITY OF CAMBRIDGE

Graduates of the University of Toronto are entitled to admission to the privileges of Affiliation in the University of Cambridge, provided that they submit certificates showing that they have attended classes in the University of Toronto for not less than three years, together with either

(a) evidence of graduation with First Class Honours (or a record which, in the opinion of the Council of the Senate of the University of Cambridge, is equivalent to First Class Honours), or

(b) evidence of graduation with Second Class Honours (or its equivalent), provided that, in one or more of the examinations by which they

have qualified for their Degree, they have passed *either* in English, two other languages, one of which is either Latin or Greek, and Mathematics; or, if the student is a native of Asia or Africa, and not of European descent, in English, in one of the following languages, Arabic, Persian-with-Arabic, Chinese, Sanskrit, or Pali, and in Mathematics.

A pass in the corresponding Part of the Previous Examination of the University of Cambridge in any of these subjects will be accepted in lieu of the subject in the Examinations by which students have qualified for their Degree provided that the necessary Part of the Previous Examination has been passed before the student matriculates.

A student admitted to the privileges of Affiliation in the University of Cambridge becomes entitled

- (a) to be exempted from the Previous Examination;
- (b) to take a Degree after two years' residence (if he so desires) instead of the three years normally required;
- (c) under certain conditions, to enter for some of the Honours Examinations of the University without fulfilling the normal requirements.

## FEES

All University fees, as also the fees of students enrolled in University College, are payable at the Bursar's Office in Simcoe Hall, between the hours of ten and one o'clock, except on Saturday.

The College fees of students enrolled in Victoria College are payable to the Fees Clerk of that College.

The College fees of students enrolled in Trinity College or St. Michael's College are payable to the Bursar of the College.

### I. UNIVERSITY FEES

Any student proceeding to a Bachelor's degree in the Faculty of Arts and enrolled in University College, or Victoria College, or Trinity College, or St. Michael's College, may attend the lectures of University professors and lecturers in the Faculty of Arts without payment of fees, except those imposed for laboratory supplies, but such students must register in the University.

#### AD EUNDEM STATUM FEES

For admission, by certificate, to Second Year.....	\$15.00
For admission ad eundem statum.....	10.00

#### LIBRARY FEE

The annual fee.....	\$2.00
---------------------	--------

Every student in attendance, proceeding to a Bachelor's degree in the Faculty of Arts, is required to pay at the time of the entry of his name with the Registrar the annual library fee.

No occasional or graduate student shall be admitted to the library save upon the payment of the annual fee.

#### LABORATORY SUPPLY FEES

Charges for supplies shall include laboratory materials and instruments used by or for the student, and ordinary wear and tear of instruments, but not charges for waste, neglect and breakage, which are to be met out of a deposit to be fixed by the Professor.

## LABORATORY SUPPLY FEES—(Contd.)

The annual supply charges for a student shall be according to the following table:

COURSES	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
<sup>1</sup> Pass Course.....	..	..	5	5
<sup>2</sup> Philosophy.....	..	..	3	..
Psychology.....	5	8	8	10
<sup>3</sup> Mathematics.....	3	3	3	..
Mathematics and Physics.....	3	5	8	..
Physics and Chemistry.....	3	8	8	10
Physics.....	5	8	8	10
Astronomy and Physics.....	..	..	..	10
Biology.....	5	9	12	20
Physiology and Biochemistry.....	5	6	10	20
<sup>4</sup> Biological and Medical Sciences.....	5	6	10	20
Chemistry and Chemistry Mineralogy and Geology I.....	5	5	13	10
<sup>5</sup> Chemistry Mineralogy and Geol- ogy II.....	5	5	4	3
<sup>6</sup> Geology and Mineralogy.....	5	9	3	3
Science (General).....	5	9	14	20
Household Science and Household Economics.....	5	11	15	20

<sup>1</sup>The Laboratory Supply fee in the Third and Fourth Years is required only from those students who are taking the Household Science option.

<sup>2</sup>The Laboratory Supply fee is not required from students of St. Michael's College.

<sup>3</sup>The Laboratory Supply fee in the Third Year is required only from those students who are taking a Science Option.

<sup>4</sup>The fees for the Faculty of Medicine are not included.

<sup>5</sup>The fees for Drawing and Assaying are not included.

## HART HOUSE FEE

The annual fee, .....\$8.00

Every male student in attendance proceeding to a Bachelor's degree in the Faculty of Arts, is required to pay to the Bursar before December 1st the annual fee of eight dollars for the maintenance of Hart House. If this fee is not paid by the above date a penalty of two dollars will be imposed, making the total fee ten dollars.

**STUDENTS ADMINISTRATIVE COUNCIL FEE**

The annual fee.....\$4.00

Every male student in attendance proceeding to a Bachelor's degree in the Faculty of Arts, is required to pay to the Bursar at the time of the entry of his name with the Registrar the annual fee of four dollars for the maintenance of the Students' Administrative Council.

**WOMEN STUDENTS ADMINISTRATIVE COUNCIL FEE**

The annual fee.....\$4.00

Every woman student proceeding to a Bachelor's degree in the Faculty of Arts, is required to pay to the Bursar at the time of the entry of her name with the Registrar the annual fee of four dollars for the maintenance of the Women Students' Administrative Council.

**MEN'S PHYSICAL TRAINING FEE**

The annual fee.....\$5.00

Every male student in attendance, proceeding to a Bachelor's degree in the Faculty of Arts, is required to pay to the Bursar the annual Physical Training fee of \$5.00 at the opening of each session in which Physical Training is compulsory for such student.

**WOMEN'S PHYSICAL TRAINING FEE**

The annual fee.....\$4.00

Every woman student in attendance, proceeding to a Bachelor's degree and registered in University College, is required to pay to the Bursar the Physical Training fee of \$4.00 at the opening of each session in which Physical Training is compulsory for such student.

**SUPPLEMENTAL PHYSICAL TRAINING FEE**

The supplemental fee.....\$10.00

Every student who has neglected to complete satisfactorily the course in Physical Training of the First or Second Year and who must take this work during the Second or Third Year respectively of his or her course, will be required to pay to the Bursar at the opening of the session a supplemental fee of \$10.00 in addition to the prescribed Physical Training fee.

**EXAMINATION FEES**

**Students proceeding regularly to the B.A. degree:**

For each annual (May) examination..... 10.00

For each Supplemental examination..... 10.00

**Teachers' Course:**

For examination in one subject of any year, each..... 2.00

For repeating an examination in a subject in which a student has already failed..... 5.00

Maximum fee..... 10.00



A candidate who fails to pay his examination fee on or before March 1st—the last day for receiving fees prior to the May examination—must pay an additional fee of one dollar.

A candidate who fails to send his application for examination by the day appointed for the receipt of such applications must pay an additional fee of one dollar.

#### DEGREE FEES

For the degree of B.A.....	\$10.00
For the degree of B.Com.....	10.00
For admission <i>ad eundem gradum</i> (B.A.).....	20.00

#### MISCELLANEOUS FEES

For certificate of honour.....	\$1.00
--------------------------------	--------

The fee for admission *ad eundem statum*, or for dispensation from attendance upon lectures, or for certificates of honour, must be paid at the time of application.

A candidate who fails to pay his University fees on or before March 1st—the last day for receiving fees prior to the May examination—must pay an additional fee of one dollar.

### II. COLLEGE FEES

A graduate in Arts, who during his undergraduate course, was enrolled in University College, or Victoria College, or Trinity College, or St. Michael's College, may attend lectures free in the college in which he was so enrolled.

#### ENROLMENT (TUITION) FEE—BACHELOR OF ARTS COURSES

Every student proceeding to the degree of Bachelor of Arts shall, on each year's enrolment in University College, or Victoria College, or Trinity College, or St. Michael's College, pay an enrolment fee according to the following schedule, which fee shall include all instruction for which fees are chargeable except laboratory supply and library fees:—

Any course, if paid in full in October, except for students on probation in the First Year.....\$75.00

By instalments:—

First instalment, if paid in October.....	38.00
Second instalment, if paid in January.....	38.00

Students on probation in the First Year—Any course, if paid in full in October..... 80.00

By instalments:—

First instalment, if paid in October.....	40.00
Second instalment, if paid in January.....	41.00

## ANNUAL FEE—BACHELOR OF COMMERCE COURSE

Every student proceeding to the degree of Bachelor of Commerce shall, on each year's enrolment in University College, or Victoria College, or Trinity College, or St. Michael's College, pay an annual fee according to the following table:

Annual fee, including tuition, library and one annual examination (the College fee in each of the first, second, third and fourth years is \$50):—

If paid in full in October..... \$110.00

By instalments:—

(a) For students enrolled in University College—

First instalment, if paid in October..... 55.00

Second instalment, if paid in January..... 56.00

(b) For all other students—

First instalment, if paid in October ..... 30.00

Second instalment, if paid in January ..... 31.00

Each student on probation in the First Year will be required to pay a fee of \$5.00 in addition to the annual fee.

All the above fees are payable in advance. After October 31st, a penalty of \$1.00 per month will be imposed until the whole amount is paid. In the case of payment by instalments the same rule as to penalty will apply. A student will not be admitted to any of the University lectures or laboratories who is in arrears for his fees.

## FEES FOR DISPENSATION

The enrolment fee for students receiving dispensation from attendance upon lectures in University College, or Victoria College, or Trinity College, or St. Michael's College, shall be \$10 for each term, in addition to the University fee of \$10. The payment of these fees entitles the student to supervision of "term work" prescribed in connection with his course.

## UNIVERSITY COLLEGE LITERARY AND ATHLETIC SOCIETY FEE

The annual fee..... \$2.00

Every male student registered in University College and proceeding to a degree shall pay to the Bursar at the opening of the session an annual fee of \$2 for the maintenance of the University College Literary and Athletic Society.

## UNIVERSITY COLLEGE WOMEN UNDERGRADUATES ASSOCIATION

The annual fee..... \$1.00

Every woman student registered in University College and proceeding to a degree shall pay to the Bursar at the opening of the session an annual fee of \$1.00 for the maintenance of the University College Women Undergraduates Association.

UNIVERSITY COLLEGE WOMEN'S UNION

The annual fee. .... \$4.00

Every woman student registered in University College and proceeding to a Bachelor's degree is required to pay to the Bursar at the time of the entry of her name with the Registrar, the annual fee of four dollars for the maintenance of the Women's Union. A reduction will be made (a) in the case of those University College students who pay also four dollars for instruction in Athletics, and (b) in the case of graduates, and in these two cases the fee for the privileges of the Union will be reduced to three dollars. The combined fee of seven dollars must be paid at one time, otherwise no reduction can be made.

VICTORIA COLLEGE STUDENTS' PARLIAMENT FEE

The annual fee. .... 75c.

Every male student registered in Victoria College shall pay to the Accountant at the opening of the session an annual fee of 75c. for the maintenance of the Victoria College Students' Parliament.

THE VICTORIA COLLEGE WOMEN STUDENTS' UNION

The annual fee. .... \$11.00.

Every woman student registered in Victoria College shall pay to the Accountant at the opening of the session an annual fee of \$11.00, of which \$10.00 shall be for the maintenance of the Women Students' Union in Wymilwood and \$1.00 for the Victoria College Women's Undergraduate Association.

III. FEES FOR OCCASIONAL STUDENTS

"A course in laboratory work" means the continuous course of instruction in laboratory or practical work offered to students in any one year in any of the subjects in which laboratory work is or may be prescribed.

"A course of lectures" means the continuous course of instruction offered in any one year in any of the subjects in which instruction is or may be given.

Laboratory fees are divided into (a) Fees for practical instruction in the laboratory, (b) Charges for supplies, which are the same as for students proceeding to the degree. (See page 184.)

The payment of fees shall not entitle any occasional student to be admitted to the laboratory work of a later year without having taken that of the earlier year or years, unless this requirement is dispensed with by the Council of the Faculty on the recommendation of the Professor.

The enrolment fee for an occasional student attending a course, or partial course, of lectures shall be as follows:—

TUITION FEES	For the	For the
	Session	Term
For a course in any one subject.....	\$15.00	\$10.00
Maximum Fee.....	75.00	40.00

All instruction fees are payable strictly in advance.

#### EXAMINATION FEES

For examination in one subject of any year, each.....	\$ 5.00
Maximum examination fee.....	10.00

## PRIZES, MEDALS, SCHOLARSHIPS AND FELLOWSHIPS

No candidate will be permitted to hold more than one scholarship; but any one who would, but for this provision, have been entitled to a second scholarship, will have his name published in the lists.

All undergraduate scholars must sign a declaration of intention to proceed to a degree in Arts in this University, and must attend lectures in one of the Colleges for the academic year immediately following such examination. The Senate, however, on the recommendation of the Faculty, may, upon satisfactory reasons being shown, permit such scholar to postpone attendance upon lectures for a year. If at the end of the year a further postponement is necessary, special application must again be made. In every such case the payment of the scholarship will likewise be postponed. The scholarships are paid in three instalments—on November 20th, January 20th and March 20th; and before each payment a scholar is required to secure from the Registrar's Office a certificate of attendance upon lectures to be signed by two senior members of the staff.

No prize, scholarship or medal will be awarded to any candidate who has been placed lower than the first class in the department to which the prize, scholarship or medal is attached.

When the letter "U" is prefixed, the award is made by the Senate of the University on the recommendation of the Council of the Faculty as the result of competition open to the students of all the Colleges. In all other cases the letter indicates the governing body by which the award is made:—the Council of University College by the letter "C", the Senate of Victoria College by the letter "V", the Corporation of Trinity College by the letter "T", and the Council of St. Michael's College by the letter "M".

With the exception of the Jean Balmer Scholarship in Science of the First Year, all honours awarded by the Senate on the recommendation of the Faculty are open to the students of all the Colleges.

The competition for a College scholarship, medal or prize is confined to the students registered in that College and shall be subject to such regulations as the College may from time to time determine.

## PRIZES

## FIRST YEAR

## ITALIAN

- U. The Italian Prize, the gift of the Minister of Foreign Affairs for the Kingdom of Italy.  
Awarded in 1923 to E. K. Brown; 1924, Miss F. E. Boake; 1925, Miss I. G. Balthazard; 1926, Miss J. E. B. Ross.

## ENGLISH

- V. The Class of 1902 Prize, the gift of Professor C. E. Auger, B.A., of the value of \$10 to the student ranking highest in English of the Pass Course.  
Awarded in 1923 to A. E. Larke; 1924, Miss A. E. Cosh; 1925, C. H. Jones; 1926, H. S. Langford.
- M. The Mahon Prize, the gift of John Mahon, Esq., of the value of \$25 to the student ranking highest in Honour English.  
Awarded in 1923 to Miss P. M. Blake; 1925, Miss V. E. Mueller, Miss I. B. Jones *proxime accessit*; 1926, C. J. Daly.

## ETHICS

- U. The Tracy Prize, of the value of \$10, the gift of Professor F. Tracy, to the student who, obtaining First Class Honours in the Course in Philosophy (English or History Option) ranks highest in Ethics.  
Awarded in 1923 to Miss W. M. Hodges; 1924, C. E. J. Cragg; 1926, J. R. M. Wilson.

## SECOND YEAR

## ITALIAN

- U. The Italian Prize, the gift of the Minister of Foreign Affairs for the Kingdom of Italy.  
Awarded in 1923 to N. P. H. Brown; 1924, E. K. Brown; 1925, Miss S. J. Stevenson; 1926, Miss I. G. Balthazard.

## ENGLISH

- C. The Alumnae Prize, the gift of the Toronto Alumnae, of the value of \$10 in books, to the student ranking highest in English Composition.  
Awarded in 1923 to N. P. H. Brown; 1924, E. K. Brown; 1925, C. P. Stacey; 1926, Miss L. R. Cornish.
- V. The Webster Prize, the gift of the late J. G. Hodgins, Esq., M.A., LL.D., I.S.O., of the value of \$10, to the student ranking highest in English of the Pass Course.  
Awarded in 1923 to Miss C. I. Davidson; 1924, Miss S. M. Hughson; 1925, R. H. Hawkins; 1926, Miss A. E. Fulton.

- M. The Hughes Prize, the gift of Frank Hughes, Esq., of the value of \$25, to the student ranking highest in Honour English.  
Awarded in 1923 to Miss B. V. Larochelle; 1924, Miss P. M. Blake; 1926, Miss J. M. Brophy.

HEBREW

- V. The Robert Johnston Prize, the gift of the Rev. Professor J. F. McLaughlin, B.A., D.D., of the value of \$15, to the student ranking highest in Hebrew of the Pass Course.  
Awarded in 1923 to J. M. Deck; 1925, A. G. Hewitt.

PHILOSOPHY

- M. The Kernahan Prize, the gift of W. T. Kernahan, Esq., in memory of the late Rev. Gregory Kernahan, of the value of \$25, to the student ranking first in the examinations in Philosophy.  
Awarded in 1922 to L. F. Barnett; 1923, T. J. Murtha; 1926, J. V. Bourke.

FIRST AND SECOND YEARS

ENGLISH

- V. The Regents' Prizes, of the value of \$10 each, will be awarded for the two best essays on a subject to be assigned by the Staff in the Department of English. Neither of these prizes will be granted twice to the same student.  
Awarded in 1923 to Miss R. I. Jenking and D. J. Creighton; 1924, Miss M. E. H. Adams and J. A. Irving; 1925, Miss A. E. Cosh and Miss K. J. Lamont; 1926, H. P. Gundy and Miss A. L. Thompson.

THIRD YEAR

ITALIAN

- U. The Italian Prize, the gift of the Minister of Foreign Affairs for the Kingdom of Italy.  
Awarded in 1923 to Miss J. F. Struthers; 1925, Miss W. E. Needler; 1926, Miss B. M. H. Corrigan.

ENGLISH

- V. The Hodgins Prize, the gift of the late J. G. Hodgins, Esq., M.A., LL.D., I.S.O., of the value of \$12, to the student ranking highest in English of the Pass Course.  
Awarded in 1923 to Miss K. E. Elliott; 1924, H. E. Dougall; 1925, C. A. Baxter.
- M. The Phelan Prize, the gift of T. N. Phelan, Esq., of the value of \$25, to the student ranking highest in Honour English.  
Awarded in 1923 to E. C. LeBel.
- M. The Alumni Prize, of the value of \$10, to the student ranking highest in English of the Pass Course.  
Awarded in 1926 to Miss K. O'Connor.

## ENGLISH BIBLE

- V. The Massey Bursaries, established by the late Hart A. Massey, Esq., one of \$25 and one of \$15, to the students ranking first and second at the examination in the English Bible.

Awarded in 1923 to E. R. Hall and J. L. Smith; 1924, J. A. C. Kell and H. E. Dougall; 1925, C. C. Oke and Miss O. C. Lindsay; 1926, R. B. Harrison.

## PHILOSOPHY

- M. The Hanrahan Prize, of the value of \$25, the gift of W. T. Kernahan, Esq., in memory of the late John Hanrahan, Esq., to the student ranking first in the examinations in Philosophy.

Awarded in 1923 to L. F. Barnett; 1924, T. P. McLaughlin and T. J. Murtha (*aeg.*); 1926, W. L. Knowlton.

## HOUSEHOLD SCIENCE

- U. The Anna Howe Reeve Prize, of the value of \$25, the gift of Dr. R. A. Reeve, "in memory of a true helpmate, whose unselfishness enabled the donor the better to discharge his duty to his Alma Mater". The Committee of Award consists of the President of the University, Professor Laird and Professor Benson.

Awarded in 1923 to Miss E. B. Hislop; 1924, Miss E. A. Jerome; 1925, Miss J. F. Turnbull; 1926, Miss E. G. Bale.

## FOURTH YEAR

## LATIN

- M. A prize of the value of \$10, to the student ranking highest in Latin of the Pass Course.

Awarded in 1926 to Miss M. E. Crummey.

## ITALIAN

- U. The Italian Prize, the gift of the Minister of Foreign Affairs for the Kingdom of Italy.

Awarded in 1924 to Miss J. F. Struthers.

## ENGLISH

- M. The Alumni Prize, of the value of \$10, to the student ranking highest in English of the Pass Course.

Awarded in 1926 to Miss M. W. Coughlin.

## FRENCH

- U. The Quebec Bonne Entente Prize, the proceeds from \$1,000, the gift of the delegates from the Province of Quebec to the Bonne Entente Movement.

The Prize shall be awarded on the results of (a) an essay in French written on one of a number of subjects in the Examination Hall, (b) translation from English into French, (c) an oral test in which regard shall be had especially to facility in speaking, understanding



and pronouncing French. The Prize shall be in money, and it is suggested that it be expended in acquiring a more perfect knowledge of French.

Competitors for this prize must file applications with the Registrar not later than March 15th.

Awarded in 1923 to H. W. Hilborn; 1924, Miss K. M. Halford and Miss G. H. McKay (*aeq.*); 1925, R. D. C. Finch; 1926, E. K. Brown.

#### CANADIAN CONSTITUTIONAL HISTORY

- V. The Robertson Prize, the gift of W. J. Robertson, Esq., B.A., LL.B., of the value of \$10, to the student ranking highest in Canadian Constitutional History.

Awarded in 1923 to R. G. Start; 1924, F. J. G. Cunningham; 1925, E. S. Livermore.

#### ETHICS

- C. The Tracy Prize, of the value of \$10, the gift of Professor F. Tracy, to the student who, obtaining Grade A in the Pass Course, ranks highest in Pass Ethics.

Awarded in 1925 to Miss M. S. R. Boyd.

#### T. CLASSICS

The Prince of Wales' Prize, \$18, for the highest first class honours in Classics.

#### T. MATHEMATICS

The Prince of Wales' Prize, \$18, for the highest first class honours in Mathematics.

#### NATURAL SCIENCE

- T. A prize of \$15 for the highest first class honours in any graduating department of the Natural and Physical Sciences.

Awarded in 1925 to Miss R. E. Younger.

#### MODERN LANGUAGES

- T. A prize of \$15 for the highest first class honours in Modern Languages.

#### ENGLISH AND HISTORY

- T. A Prize of \$15 for the highest first class honours in English and History.

#### MODERN HISTORY

- T. A Prize of \$15 for the highest first class honours in Modern History.

#### PHILOSOPHY

- T. A Prize of \$15 for the highest first class honours in Philosophy.

#### POLITICAL SCIENCE

- T. A Prize of \$15 for the highest first class honours in Political Science.

Awarded in 1923 to J. F. Day.

## COMMERCE AND FINANCE

- T. A Prize of \$15 for the highest first class honours in Commerce and Finance.

## PASS COURSE

- T. A Prize of \$15 for the highest ranking in Grade A Standing in the Pass Course.  
Awarded in 1923 to Miss H. J. Hope; 1924, Miss A. E. Gillard; 1926, C. J. Frank.

## THIRD AND FOURTH YEARS

## BIBLICAL GREEK

- V. The Wallbridge Prize, the gift of the late A. F. Wallbridge, Esq., of the value of \$10, to the student ranking first in Life and Letters of St. Paul.  
Awarded in 1923 to C. H. Dickinson; 1924, A. E. A. Menzies; 1925, C. C. Oke; 1926, J. P. Cooke.

## NEW TESTAMENT INTRODUCTION

- V. The Joy Wallace Prize, endowed by the Rev. Professor F. H. Wallace, M.A., D.D., of the value of \$15, to the student ranking first in New Testament Introduction and Exegesis.  
Awarded in 1923 to S. A. Moote; 1924, C. H. Dickinson; 1925, R. E. Gosse; 1926, C. C. Oke.

## ALL THE YEARS

## JEWISH HISTORY, LITERATURE, ETC.

- U. The Menorah Prize, the gift of B. M. Greene, Esq., of the value of \$50, will be offered for award annually under the following conditions:
1. The competition is open to all undergraduates in attendance at the University.
  2. Each competitor is required to submit an essay on some subject in Jewish History, Literature, etc., to be approved by the University.
  3. Each competitor is required to submit the proposed subject of his essay to the Registrar of the University not later than December 1st and have the same approved by the Examiners.
  4. The essay should be typewritten and consist of not less than 5,000 or more than 10,000 words.
  5. It must be accompanied by an outline, a summary, and a complete bibliography.
  6. All authorities must be carefully cited in the approved manner, and quotations must be clearly indicated.
  7. All essays must be submitted under a pseudonym, which should also be enclosed in a sealed envelope with the writer's real name, college or faculty, and home address.

8. The essay and accompanying identification must be in the hands of the Registrar of the University not later than May 1st.

9. In case no essay is deemed worthy by the Examiners the prize for the year will not be awarded.

#### FRENCH

- C. The Squair French Prose Prize, of the annual value of \$10, endowed by Professor Squair, is open for competition among students in attendance upon lectures in University College. The award shall be made annually by the Council of University College on the recommendation of the teaching staff in French. The books awarded are to be chosen by the winner after consultation with the staff in French.

Competitors for this prize must file applications with the Registrar of University College not later than March 15th.

Awarded in 1923 to Miss H. E. Hetherington; 1924, Miss J. E. Lyali; 1926, Miss I. G. Balthazard.

#### ENGLISH

- V. The Lily Denton Keys Prize, of the annual value of \$25, endowed by Mr. Norman A. Keys, B.A., as a memorial to his wife, Lily Denton, B.A., is open for competition among all the Arts undergraduates of Victoria College. The subject of the essay shall be "The Present Day Novel".

Awarded in 1923 to Miss K. M. Davies; 1924, N. J. Endicott; 1925, Miss M. G. Stinson; 1926, Miss M. I. Creighton.

#### NEW TESTAMENT HISTORY

- V. The Ryerson Prize, the gift of the late J. G. Hodgins, Esq., M.A., LL.D., I.S.O., of the value of \$12, to the student ranking first in Synoptic Gospels.

Awarded in 1923 to R. E. Gosse; 1924, C. C. Oke; 1926, A. G. Hewitt.

#### ORATORY

- V. The Michael Fawcett Prize of \$40 is awarded annually for "the best extempore oration" on a subject to be assigned at the commencement of each college year by the trustees of the fund. This prize is open to all candidates on probation for the ministry of the United Church of Canada.

Awarded in 1923 to C. H. Dickinson; 1924, F. E. Vipond; 1925, A. E. A. Menzies; 1926, R. E. Gosse.

#### GREEK

- T. A Prize of \$20 for Greek Prose.

#### LATIN

- T. A Prize of \$20 for Latin Verse.

- T. A Prize of \$20 for Latin Essay.

#### GREEK or LATIN

- T. A Prize of \$20 for an essay in English on some subject of classical study.

## FRENCH

- T. A Prize of \$20 for a French Essay.

## ENGLISH

- T. A Prize of \$20 for an English Essay.

Awarded in 1924 to G. Sparling, Miss A. N. Wilson *proxime accessit*.

- T. A Prize of \$20 for an English Poem.

1924, C. V. Kister (Honourable mention).

The subjects of these Trinity College Prizes will be posted on the College notice board.

## MEDALS

## SECOND YEAR

## THE PASS COURSE

- U. The Governor-General's Silver Medal will be awarded to that candidate who, having Grade A standing in the Second Year, has the highest average percentage of marks obtained at the examinations of the First and Second Years, such examinations having been taken in two consecutive calendar years.

The discretion of the examiners, as in the examination for the Governor-General's Gold Medal, shall apply also to this examination.

Awarded in 1923 to Miss M. S. R. Boyd; 1925, Miss A. V. Parker; 1926, Miss R. R. Martin.

## FOURTH YEAR

## GENERAL PROFICIENCY

- U. The Governor-General's Gold Medal is intended for the encouragement of the study of English in those departments in which English is not an integral portion of the work of the third and fourth years and will be awarded to that candidate who, taking not less than sixty-six per cent. in English (as defined below), and not less than seventy-five per cent. in some one of such honour departments, shall also take the best aggregate mark in English and the honour department. English shall be understood to mean only the papers based on English Courses 4a, 4e and 4f, as prescribed for Honour Courses. The essays prescribed for Honour students are not taken into account in this award.

In order to obviate any unfairness arising from a different system of marking in different departments, the principle shall always be adopted of raising the marks of the best candidate in the first class of each department to the maximum, and those of the others in proportion, unless the examiners of any department report that the marks of the best candidate in their department are not of sufficient merit to be so raised.

The Registrar shall publish not only the name of the successful candidate, but also the names of all candidates who, by satisfying the above conditions, are eligible for the award.

Competitors for this medal must file applications with the Registrar not later than March 15th.

Awarded in 1923 to F. G. Ward, Miss R. V. H. Kendrick *proxime accessit*; 1924, F. J. G. Cunningham, Miss I. F. Irwin and L. F. Barnett *proxime accesserunt*; 1925, D. M. Fleming, T. J. Murtha *proxime accessit*.

- V. The Prince of Wales' Gold Medal, endowed by His late Majesty King Edward VII, will be awarded to the student who ranks first in Grade A Standing in the Pass Course.

Awarded in 1924 to Miss F. M. Spence; 1926, J. M. Deck.

- V. The Prince of Wales' Silver Medal, endowed by His late Majesty King Edward VII, will be awarded to the student who ranks second in Grade A Standing in the Pass Course.

Awarded in 1924 to F. S. Rivers.

- V. The Governor-General's Silver Medal will be awarded to the candidate standing highest in Honour Modern English of the Fourth Year examination, provided he has taken First or Second Class in his Honour Department or Grade A Standing in the Pass Course at graduation, First Class Honour men having the preference and provided that this English is not an integral portion of his course. In case such a candidate has already received the Governor-General's Gold Medal, the next in rank shall be eligible.

Honour Modern English shall be understood to mean only the papers based on English Courses 4a, 4e and 4f. The essays prescribed for Honour students are not taken into account in this award.

Awarded in 1923 to W. H. Trethewey; 1924, F. J. G. Cunningham (mention), Miss I. F. Irwin.

- T. The Governor-General's Silver Medal will be awarded to the student taking the best degree, provided that First Class Honours shall have been obtained in an Honour Course or Grade A Standing in the Pass Course.

Awarded in 1923 to J. F. Day; 1924, Miss A. E. Gillard; 1925, Miss R. E. Younger; 1926, C. J. Frank.

#### CLASSICS

- C. The McCaul Medal (Gold), established in 1886 by the late W. H. C. Kerr, M.A., Gold Medallist in Classics of 1859, in memory of the Rev. John McCaul, LL.D., First Professor of Classics, and First President of University College. It was presented by Mr. Kerr from 1886 up to his death, and from 1891 to 1894, after his death, by his widow. Since then the donors have been in 1895 John Hoskin, K.C., LL.D., Chairman of the Board of Trustees 1906-1910; in 1896 Nicol

Kingsmill, M.A., K.C., Classical Medallist of 1856; in 1897, A. M. Crombie, Esq., of Montreal, in memory of his brothers Ernestus Crombie, M.A., Gold Medallist in Classics of 1854, and Marcellus Crombie, M.A., LL.B., Gold Medallist in Classics of 1857; in 1898 and 1899 William Dale, M.A., Gold Medallist in Classics of 1871; in 1900 the late John Fletcher, M.A., LL.D., Gold Medallist in Classics of 1872, and Maurice Hutton, M.A., LL.D.; in 1901 Adam Carruthers, M.A., Gold Medallist in Classics of 1880; in 1902 W. S. Milner, M.A., Gold Medallist in Classics of 1881; in 1903 the late G. W. Johnston, Ph.D.; in 1904-1922 the Hon. Sir J. M. Gibson, M.A., LL.D., by whom it was endowed in 1922.

The winners of the McCaul Medal have been as follows:

1886, W. P. Mustard; 1887, E. O. Sliter; 1888, H. J. Crawford (*ob.*); 1889, H. J. Cody; 1890, James Colling; 1891, C. A. Stuart (*ob.*); 1892, F. W. Shipley; 1893, F. B. R. Hellem; 1894, J. H. Brown (*ob.*); 1895, W. T. F. Tamblin; 1896, Donald McFayden; 1897, R. O. Jolliffe; 1898, Miss Florence E. Kirkwood; 1899, W. H. Alexander; 1900, Miss Landon Wright; 1901, E. J. Kylie (*ob.*); 1902, E. H. Oliver; 1903, A. G. Brown; 1904, W. H. Tackaberry (*ob.*); 1905, S. A. Cudmore; 1906, R. W. Hart; 1907, W. A. Rae; 1908, Miss C. M. Knight; 1909, A. G. Hooper; 1910, no award. 1911, C. N. Cochrane; 1912, C. H. Carruthers; 1913, H. V. Wrong (*ob.*); 1914, D. Breslove; 1915, H. R. Kemp; 1916, W. M. Hugill; 1917, Miss E. A. Sinclair; 1918, no award; 1919, Miss E. Harris; 1920, Miss M. A. Dickinson; 1921, H. L. Tracy; 1922, Miss M. C. Needler; 1923, L. A. MacKay; 1924, no award; 1925, F. W. Beare; 1926, P. F. McCullagh.

V. The Edward Wilson Gold Medal, founded by the late Bishop Edward Wilson in memory of his son Edward Wilson.

Awarded in 1923 to Miss R. V. H. Kendrick; 1924, H. N. Couch.

#### MODERN LANGUAGES

C. The Governor-General's Silver Medal.

Awarded in 1923 to Miss C. P. Cohen; 1924, P. Matenko; 1925, N. P. H. Brown, R. D. C. Finch, Miss M. J. MacEwan and Miss P. A. Ross (*aeq.*); 1926, E. K. Brown.

V. The J. J. MacLaren Gold Medal.

Awarded in 1923 to H. W. Hilborn; 1924, Miss G. H. McKay; 1925, Miss M. G. Stinson; 1926, Miss A. E. Graydon.

#### ENGLISH (4a, 4d, 4f)

V. The Reginald Heber Manning Jolliffe Gold Medal, founded by his mother, in memory of Lieutenant R. H. M. Jolliffe, who fell at Vimy Ridge, April 9th, 1916.

Awarded in 1923 to Miss L. M. Coburn; 1924, N. J. Endicott and Miss R. J. Stewart (ranked), Miss S. M. Davidson; 1925, D. G. Creighton (ranked), Miss E. G. Willard; 1926, J. A. Irving (ranked), Miss M. E. H. Adams.

ENGLISH

- M. The Sir Bertram Coghill Alan Windle Gold Medal.

Awarded in 1924 to E. C. LeBel and J. V. Burke (*aeq.*); 1925, Miss B. V. Larochelle.

POLITICAL SCIENCE

- C. The Breuls Gold Medal, the gift of H. A. C. Breuls, B.A. The award is to be made by the Council of University College on the recommendation of the Department of Political Science.

Awarded in 1925 to D. M. Fleming; 1926, J. J. Robinette.

- V. The J. Reginald Adams Gold Medal, established by Rev. and Mrs. G. K. B. Adams as a memorial of their son Lieut. J. Reginald Adams who died of wounds at Etaples, France, November 26th, 1917.

Awarded in 1924 to F. J. G. Cunningham; 1925, H. E. Dougall.

- V. The J. Reginald Adams Silver Medal.

Awarded in 1925 to E. A. Beecroft.

PHILOSOPHY

- V. The E. J. Sanford Gold Medal.

Awarded in 1923 to S. J. Mathers; 1924, R. E. Gosse and H. Moores (*aeq.*); 1925, C. G. Park; 1926, C. A. Baxter.

- M. The Mercier Gold Medal.

Awarded in 1924 to L. F. Barnett; 1925, T. J. Murtha; 1926, T. P. McLaughlin.

MATHEMATICS

- U. The Bronze Medal, the gift of the British Association for the Advancement of Science, awarded to a student of the Fourth Year, on the nomination of the Department of Mathematics.

Awarded in 1926 to J. D. Burk.

PHYSICS

- U. The James Loudon Gold Medal, the gift of the local Committee for the Toronto Meeting of the American Association for the Advancement of Science. Awarded to the candidate ranking highest in first class honours.

Awarded in 1923 to Miss R. Carnahan; 1924, Miss K. Baird; 1925, Miss E. Cohen; 1926, I. Walerstein.

ASTRONOMY AND PHYSICS

- U. The Royal Astronomical Society of Canada Gold Medal, awarded to the candidate obtaining the first place in first class honours.

Awarded in 1926 to F. S. Hogg.

SCIENCE

- V. The G. A. Cox Gold Medal, the gift of Mr. Herbert C. Cox.

Awarded in 1923 to G. R. Balfour; 1924, Miss V. I. Jones; 1925, T. D. H. Kendrick; 1926, Miss D. F. Forward.

GEOLOGY

- U. The Coleman Gold Medal.

## ANY HONOUR COURSE

## V. The Regents' Gold Medals.

Awarded in 1923 to F. G. Ward—Oriental Languages, Miss R. Carnahan—Mathematics and Physics, Miss M. E. Craig—Household Economics; 1924, N. J. Endicott—English and History, Miss R. J. Stewart—Philosophy (English or History Option), Miss M. E. Depew—Mathematics and Physics, Miss M. R. B. Fawcett—Household Economics; 1925, F. R. Vanderburgh—Oriental Languages, D. G. Creighton—English and History, E. M. Gundy—Modern History, Miss I. H. Caldwell—Household Science, Miss E. A. Davis—Household Economics; 1926, J. A. Irving—Philosophy (English or History Option), N. W. McCutcheon—Mathematics and Physics, Div. I, Miss S. M. Hughson, and Miss E. E. H. Jackson—Household Economics.

## V. The S. H. Jones Silver Medals.

Awarded in 1923 to Miss M. G. Bailey—Modern Languages, H. J. S. Howey—Philosophy, C. C. Oke—Philosophy (English or History Option), W. L. Webster—Mathematics and Physics, Miss M. A. Caldwell—Household Science, Miss K. G. Crosby—Household Economics; 1924, Miss I. F. Irwin—Classics, Miss J. A. B. Maitland—Philosophy (English or History Option), E. H. Graham—Mathematics and Physics; 1925, Miss B. A. Anderson—Modern Languages, Miss G. Bennett—English and History; 1926, Miss M. E. Balkwill and Miss D. E. Elliott—Modern Languages; Miss A. M. Tremaine, Miss M. E. H. Adams ranked equal—English and History, W. R. Junkin—Commerce and Finance, W. S. W. Breese—Philosophy.

## ALL THE YEARS

## NATURAL SCIENCE

- U. The Cawthorne Medal, the gift of F. T. Shutt, M.A., awarded on the recommendation of the Natural Science Association.

## SCHOLARSHIPS, FELLOWSHIPS AND BURSARIES

## FIRST YEAR

## CLASSICS

- C. The Moss Scholarship, of the value of \$60, founded by subscription in honour of the late Hon. Chief Justice Thomas Moss.  
Awarded in 1923 to R. R. H. Page; 1924, Miss H. I. MacTaggart; 1925, M. St. A. Woodside; 1926, J. M. Cowan.
- V. The Robertson Scholarship, of the value of \$50, the gift of Professor J. C. Robertson, M.A.  
Awarded in 1924 to J. E. Liddy; 1925, D. O. Robeson; 1926, S. H. Gould.
- M. The McBrady Scholarship, of the value of \$25.  
Awarded in 1925 to G. F. Power.



SEMITIC LANGUAGES or GREEK AND HEBREW

- T. The Pettit Scholarship, of the value of \$40, with free tuition for three years, provided the scholar obtains first class honours at subsequent examinations.

ORIENTAL LANGUAGES

- V. The A. P. Misener Scholarship of the value of \$25, the gift of the Rev. W. A. Potter, M.A., B.D., in memory of the late Rev. Professor Misener. Awarded in 1923 to R. M. Dingwall.

MODERN LANGUAGES

- C. The Edward Blake Scholarship, of the value of \$60, the gift of the late Hon. Edward Blake, formerly Chancellor of the University. Awarded in 1923 to E. K. Brown; 1924, Miss E. B. Abbott and Miss M. H. Wickware (*aeq.*); 1925, Miss I. G. Balthazard; 1926, Miss M. H. Lake.

POLITICAL SCIENCE

- U. The Bankers' Scholarship, of the value of \$70, the gift of the Bank of Toronto, the Canadian Bank of Commerce, the Dominion, Imperial, Standard, and Traders Banks, and the Union Bank of Lower Canada. Only such candidates are eligible as have passed the examination of the First Year and as may undertake to proceed to graduation in the Department of Political Science. A special examination on some special text-book of history or finance will be held at the time of the Supplemental examination in September, and each candidate must submit an application for this examination to the Registrar on or before August 1st. This scholarship is not tenable with any other.

The prescribed text-books are as follows:—

1927: NOURSE, *American Agriculture and the European Market*.

1928: PIGOU, *Industrial Fluctuations*.

Awarded in 1923 to H. A. Stark; 1924, E. M. Reid; 1925, D. C. MacGregor.

MATHEMATICS

- U. A Scholarship, of the value of \$50. Awarded in 1924 to M. A. Nicholas; 1925, R. W. Fowler; 1926, D. Derry.

MATHEMATICS AND PHYSICS

- U. The Alexander T. Fulton Scholarship, of the value of \$60, the gift of the late Alexander T. Fulton, Esq. Awarded in 1923 to J. D. Burk; 1924, G. deB. Robinson; 1925, A. W. Tucker; 1926, P. M. Millman.

SCIENCE

- U. The First Alexander T. Fulton Scholarship, of the value of \$50, the gift of the late Alexander T. Fulton, Esq. Awarded in 1923 to Miss D. F. Forward; 1924, E. H. Bensley; 1925, Miss I. R. Hogg; 1926, R. W. McKay.

- U. The Second Alexander T. Fulton Scholarship, of the value of \$40, the gift of the late Alexander T. Fulton, Esq.  
Awarded in 1923 to A. W. H. Needler; 1924, Miss B. M. Cain; 1925, R. J. Monkman; 1926, J. D. M. Griffin.
- U. The Third Alexander T. Fulton Scholarship, of the value of \$30, the gift of the late Alexander T. Fulton, Esq.  
Awarded in 1923 to L. J. Harris; 1924, H. B. Collier; 1925, R. G. Hunter; 1926, M. W. Bannan, H. C. Foster and A. H. Sellers (*aeq.*).
- U. The Jean Balmer Scholarship in Science, of the value of \$50, the gift of Mrs. Jane Balmer in memory of her daughter Miss Jean Balmer, B.A., and in fulfilment of the wish expressed in the will of another daughter Miss Eliza M. Balmer, B.A.  
This Scholarship is open for competition only to students registered in University College.  
Awarded in 1923 to A. W. H. Needler; 1924, E. H. Bensley; 1925, Miss I. R. Hogg; 1926, R. W. McKay.

## ANY COURSE

- U. The Sir Edmund Walker Scholarship, of the value of \$150 each year for three years, the gift of the family of the late Sir Edmund Walker in commemoration of his services as Chairman of the Board of Governors and later as Chancellor of the University. The primary basis for the award of this Scholarship shall be the student's attainments and promise, but financial need shall also be taken into account. The enjoyment of the Scholarship shall depend upon satisfactory progress in the year preceding. The award shall be made on June 15th of each year by a committee to consist of the President of the University, the Deans of the Faculties of Arts and Medicine, and Professor E. M. Walker. Applications for this Scholarship must be filed with the Registrar on or before May 1st. This Scholarship is also open to competition for students of the First Year in the Faculty of Medicine. Awarded in 1926 to Miss K. Pless.
- U. The Robert Bruce Scholarship, of the value of \$75 each year for three years, founded from the estate of the late Robert Bruce of Quebec, is awarded annually to a student registered in the Second Year on the basis of "superior answering" at the examination of the First Year. The following regulations govern the award of this scholarship:
1. Until 1948 it shall be awarded only to students of Scottish extraction.
  2. All candidates must have complete Matriculation in this University as at the date of entrance.
  3. The Committee of Award shall consist of the President and the Deans of the Faculties of Arts, Medicine and Applied Science and Engineering.
  4. Applications for this scholarship shall be filed with the Registrar of the University on or before November 1st.
- Awarded in 1926 to Miss R. E. Oliphant.

- V. The Hamilton Fisk Biggar Scholarships, of the value of \$50 each, awarded on the results of the May examinations to the students standing first in the University in those courses, Pass or Honour, where no prizes or scholarships are now offered. Preference will be given to students of the Third Year.

Awarded in 1923 to Miss M. E. H. Adams—English and History, J. A. Irving—Philosophy (English or History Option), Miss S. M. Hughson—Household Economics; 1924, H. B. Hendershot—Pass, Miss K. J. Lamont—English and History, C. E. J. Cragg—Philosophy (English or History Option); 1925, R. V. Wilson—Pass, Miss I. L. Courtice—Household Economics, C. H. Jones—Commerce and Finance; 1926, C. E. Helwig—Pass Course, Miss A. M. Muckle—English and History, Miss E. M. Masson—Modern Languages, J. R. M. Wilson—Philosophy (English or History Option), Miss J. E. Malcolm—Household Economics.

## SECOND YEAR

### CLASSICS

- C. The William Mulock Scholarship, of the value of \$60, the gift of the Rt. Hon. Sir William Mulock, P.C., M.A., LL.D., for many years Vice-Chancellor, and later Chancellor of the University. Awarded in 1923 to F. W. Beare; 1924, Miss D. H. Wright; 1925, Miss H. I. MacTaggart; 1926, M. St. A. Woodside.
- T. The Hart-Moorhouse Scholarship, of the value of \$40, the gift of Alumni, commemorating Messrs. W. Hart and A. C. Moorhouse, who were drowned in their graduating year, 1906, to the student ranking highest in first class honours in Classics, or, failing these, in English and History with the classical option. Awarded in 1923 to A. B. Robertson.

### ORIENTAL LANGUAGES

- V. A Scholarship of \$50, the gift of the Rev. Professor J. F. McLaughlin, B.A., D.D., and others.

### MODERN LANGUAGES

- C. The George Brown Scholarship, of the value of \$60, founded in honour of the late Hon. George Brown. Awarded in 1923 to Miss M. J. MacEwan; 1924, E. K. Brown; 1925, Miss E. B. Abbott, Miss H. M. Wickware and Miss S. J. Stevenson (*aeg.*); 1926, Miss I. G. Balthazard.

### ENGLISH

- U. The Aikins Scholarship, of the value of \$125, the gift of Sir J. A. M. Aikins, M.A., LL.D., to be awarded to the student of the Honour Course in English and History ranking first in English at the annual

examination. The term essays of each candidate should be submitted, if necessary, to the examiners in English to assist them in determining the relative standing of candidates.

Awarded in 1925 to C. P. Stacey; 1926, Miss C. MacVannel.

#### FRENCH

- V. The Essa Van Dusen Dafoe Scholarship, of the value of \$50, the gift of Dr. W. A. Dafoe, in memory of his wife, Essa Van Dusen, to be awarded annually to the student standing highest in a special examination in both oral and written French to be held in the Easter Term.

Awarded in 1923 to Miss A. G. Nelson; 1924, Miss M. E. Balkwill; 1925, Miss E. F. Luke; 1926, Miss M. E. Jones.

#### PHILOSOPHY

- U. The John Macdonald Scholarship, of the value of \$50, the gift of the late Hon. John Macdonald.

Awarded in 1923 to C. G. Park; 1924, C. A. Baxter; 1925, H. G. Hendershot; 1926, Miss I. H. McBride.

- T. A Scholarship in Mental and Moral Philosophy, which entitles the holder to free tuition in the Third Year and in the Fourth Year, if he obtains first class honours in the Second and Third Year.

Awarded in 1926 to W. L. Smith.

#### POLITICAL SCIENCE

- U. The First Alexander Mackenzie Scholarship, of the value of \$75, the gift of the friends of the late Hon. Alexander Mackenzie.

Awarded in 1923 to D. M. Fleming; 1924, I. M. Gringorten; 1925, E. M. Reid; 1926, K. G. Morden.

- U. The Second Alexander Mackenzie Scholarship, of the value of \$50, the gift of the friends of the late Hon. Alexander Mackenzie.

Awarded in 1925 to H. P. Green; 1926, D. C. MacGregor.

- T. A Scholarship in Political Science which entitles the holder to free tuition in the Third Year and in the Fourth Year, if he obtains first class honours in his Second and Third Year.

Awarded in 1925 and 1926 to E. M. Reid.

#### MATHEMATICS AND PHYSICS

- U. The William Mulock Scholarship, of the value of \$80, the gift of the Rt. Hon. Sir William Mulock, P.C., M.A., LL.D., for many years Vice-Chancellor, and later Chancellor of the University.

Awarded in 1924 to J. D. Burk; 1925, G. deB. Robinson; 1926, A. W. Tucker.

#### PHYSICS

- U. The Edward Blake Scholarship, of the value of \$45, the gift of the late Hon. Edward Blake, M.A., LL.D., formerly Chancellor of the University.

Awarded in 1926 to R. G. Hunter.

BIOLOGICAL AND MEDICAL SCIENCES

- U. The Edward Blake Scholarship, of the value of \$45, the gift of the late Hon. Edward Blake, M.A., LL.D., formerly Chancellor of the University. Awarded in 1923 to W. J. B. Dickson; 1924, L. J. Harris; 1925, E. H. Bensley; 1926, C. G. Smith.

(1) BIOLOGY and (2) GEOLOGY AND MINERALOGY

- U. The Edward Blake Scholarship, of the value of \$45, the gift of the late Hon. Edward Blake, M.A., LL.D., formerly Chancellor of the University.

Awarded in 1923 to (1) W. R. Watson, (2) C. S. Hanes; 1924, (1) D. S. Rawson, (2) A. W. H. Needler; 1925, (2) J. Satterly.

CHEMISTRY MINERALOGY AND GEOLOGY

- U. The Edward Blake Scholarship, of the value of \$45, the gift of the late Hon. Edward Blake, M.A., LL.D., formerly Chancellor of the University.

Awarded in 1926 to Miss M. A. Holt.

In case one or more of the four foregoing scholarships is not awarded, the amount rendered available will be divided among the other scholars, but no award shall exceed \$60.

CHEMISTRY MINERALOGY AND GEOLOGY

- V. The James G. Burns Scholarship, of the value of \$50, endowed by the Rev. Dr. and Mrs. R. N. Burns as a memorial of their son Major James G. Burns, D.S.O., B.A., killed in action at Cambrai, France, September 28th, 1918.

Awarded in 1925 to H. B. Collier.

ANY COURSE

- V. The Hamilton Fisk Biggar Scholarships, of the value of \$50 each, awarded on the results of the May examinations to the students standing first in the University in those courses, Pass or Honour, where no prizes or scholarships are now offered. Preference will be given to students of the Third Year.

Awarded in 1923 to Miss E. A. Jerome—Household Economics; 1924, Miss M. E. H. Adams—English and History, Miss M. E. Balkwill—Modern Languages, J. A. Irving—Philosophy (English or History Option), Miss S. M. Hughson—Household Economics; 1925, Miss K. J. Lamont—English and History, C. E. J. Cragg (ranked)—Philosophy (English or History Option), Miss M. E. Walton—Household Economics; 1926, Miss A. E. Fulton—Pass Course, Miss I. L. Courtice—Household Economics.

THIRD YEAR

CLASSICS

- C. The Moss Scholarship, of the value of \$60, founded by subscription in honour of the late Hon. Chief Justice Thomas Moss. Awarded in 1924 to F. W. Beare; 1925, R. R. H. Page; 1926, Miss H. I. MacTaggart.

## MODERN LANGUAGES

- C. The Julius Rossin Scholarship, of the value of \$60, the gift of the late Julius Rossin, M.A.

Awarded in 1923 to Miss K. M. Halford and P. Matenko (*aeq.*); 1924, Miss M. J. MacEwan; 1925, E. K. Brown; 1926, H. Steinhauer.

## ENGLISH AND HISTORY, MODERN LANGUAGES

- V. The George Dennis Morse Scholarship, of the value of \$50, founded by the late Mrs. Elizabeth Morse.

Awarded in 1923 to Miss G. H. McKay; 1924, D. G. Creighton; 1925, Miss A. E. Graydon; 1926, Miss E. F. Luke.

## ENGLISH

- U. The Aikins Scholarship, of the value of \$125, the gift of Sir J. A. M. Aikins, M.A., LL.D., to be awarded to the student of the Honour Course in English and History ranking first in English at the annual examination. The term essays of each candidate should be submitted, if necessary, to the examiners in English to assist them in determining the relative standing of candidates.

Awarded in 1925 to W. S. Milne; 1926, Miss D. J. McKay.

## ENGLISH (3a, 3d, 3e)

- V. The Reginald Heber Manning Jolliffe Scholarship, of the value of \$30, founded by his mother in memory of Lieutenant R. H. M. Jolliffe, who fell at Vimy Ridge, April 9th, 1916.

Awarded in 1923 to N. J. Endicott; 1924, D. G. Creighton (ranked); 1925, J. A. Irving; 1926, Miss M. R. M. Dawes, Miss M. K. Hunt, Miss D. J. McKay (*aeq.*).

## PHILOSOPHY

- C. The John Macdonald Scholarship, of the value of \$50, the gift of the late Hon. John Macdonald.

Awarded in 1924 to F. H. Page.

- V. The George John Blewett Scholarship, of the value of \$50, the gift of Mrs. G. J. Blewett in memory of the late Rev. Professor Blewett.

Awarded in 1923 to H. Moores; 1924, C. G. Park; 1925, C. A. Baxter.

## POLITICAL SCIENCE

- U. The First Alexander Mackenzie Scholarship, of the value of \$75, the gift of the friends of the late Hon. Alexander Mackenzie.

Awarded in 1923 to J. G. Kelly; 1926, E. M. Reid.

- U. The Second Alexander Mackenzie Scholarship, of the value of \$50, the gift of the friends of the late Hon. Alexander Mackenzie.

Awarded in 1923 to P. N. Currie; 1926, J. J. Minsky.

These scholarships were awarded in 1924 to D. M. Fleming and W. F. Spence (*aeq.*); 1925, S. Ciglen and J. J. Robinette (*aeq.*).

MATHEMATICS AND PHYSICS

- U. A Scholarship of the value of \$60, the gift of the Local Committee for the Toronto meeting of the American Association for the Advancement of Science. In awarding this scholarship, the theoretical and practical work in this department will be estimated in the proportion of three to one.

Awarded in 1923 to E. H. Graham; 1924, Miss E. Cohen; 1925, Miss E. J. Allin, F. S. Hogg and H. G. I. Watson (*aeq.*); 1926, H. H. Blakeman.

MATHEMATICS AND PHYSICS, PHYSICS

- U. The Ramsay Scholarship, of the value of \$50, the gift of the late Mr. William Ramsay, of Bowland, Scotland. The scholarship is open for competition to all students in the Third Year in the courses of (1) Physics and (2) Mathematics and Physics. The award is made to the student who obtains the highest aggregate standing in experimental physics during the first three years of his course and who elects to proceed to the B.A. Degree in Physics in his final year.

Awarded in 1923 to Miss K. Baird; 1924, Miss E. Cohen and M. J. Liggett (*aeq.*); 1925, H. G. I. Watson; 1926, H. H. Blakeman.

PHYSICS

- U. A scholarship of the value of \$55, the gift of the Local Committee for the Toronto meeting of the American Association for the Advancement of Science.

BIOLOGICAL AND MEDICAL SCIENCES

- U. The Daniel Wilson Scholarship, of the value of \$30, the gift of the late William Christie, Esq.

Awarded in 1923 to W. S. Keith; 1924, H. F. P. Grafton; 1925, L. Fineman; 1926, E. H. Bensley.

BIOLOGY

- U. The Daniel Wilson Scholarship, of the value of \$30, the gift of the late William Christie, Esq.

Awarded in 1924 to W. R. Watson; 1925, Miss D. F. Forward; 1926, Miss J. E. Millsap.

In case either of the two foregoing scholarships is not awarded, the amount rendered available will be given to the scholar in the other department.

CHEMISTRY MINERALOGY AND GEOLOGY

- U. The Daniel Wilson Scholarship, of the value of \$30, the gift of the late William Christie, Esq.

Awarded in 1923 to H. R. Hugill; 1924, H. J. Rose; 1925, W. Gerrie and W. D. S. McKenzie (*aeq.*).

## GEOLOGY AND MINERALOGY

- U. The Daniel Wilson Scholarship, of the value of \$30, the gift of the late William Christie, Esq.

Awarded in 1924 to R. J. Watson.

In case either of the two foregoing scholarships is not awarded, the amount rendered available will be given to the scholar in the other department.

## ANY COURSE

- V. The Hamilton Fisk Biggar Scholarships, of the value of \$50 each, awarded on the results of the May examinations to the students standing first in the University in those courses, Pass or Honour, where no prizes or scholarships are now offered.

Awarded in 1923 to R. F. Trewin—Pass, Miss I. F. Irwin—Classics; 1924, Miss M. G. Stinson—Modern Languages, E. M. Gundy—Modern History; 1925, Miss J. A. Parker—Pass, Miss M. E. H. Adams—English and History, J. A. Irving (ranked)—Philosophy (English or History Option), D. W. S. McKenzie (ranked)—Chemistry and Mineralogy, K. R. Wilson—Commerce and Finance; 1926, J. E. Liddy—Classics, Miss D. J. McKay—English and History, W. T. G. Hackett—Political Science, D. J. Wilson—Philosophy (English or History Option), H. B. Collier—Chemistry, Miss M. E. Walton—Household Economics.

## FOURTH YEAR

- T. The Jubilee Scholarship, of the value of \$120, tenable for two years, was founded by the Society for the Propagation of the Gospel, and is awarded yearly to the most deserving Bachelor of the Year who has obtained at least second class. On admission to the scholarship a declaration must be signed by the holder that it is his purpose to complete the Divinity Course in Trinity College and to present himself as a candidate for Holy Orders. Should he fail to do so, he will be held bound to refund to the College such proceeds of the scholarship as he shall have received.

Awarded in 1923 to L. A. Spencer; 1924, F. A. Smith; 1925, D. S. Catchpole; 1926, C. J. Frank.

## FIRST AND THIRD YEARS

The McClure Scholarship of \$45 will be awarded to the student of the First, Second or Third Year Arts who takes the highest standing in First Year Hebrew at the University, and who is preparing for the study of Theology in Knox College.

In order to hold this scholarship a student must give attendance on the lectures of the session in which the scholarship is won, and must sign a declaration that it is his intention to enter the ministry of the United Church of Canada, and to prosecute theological study in Knox College.



## ALL THE YEARS

- U. The Sir Wilfrid Laurier Memorial Scholarship, of the value of \$100, the gift of the Ontario Women's Liberal Association. The award is made for proficiency in French Conversation on the recommendation of the Department of French of the Faculty of Arts, to a Canadian born, English speaking student, the son or daughter of a British subject by birth or naturalization, whose native tongue is not French.
- U. The Khaki University and Y.M.C.A. Memorial Scholarship Fund, established by the Khaki University Committee. At the present time this fund is being used to make loans to returned-soldier students of the higher years. Applications for such loans should be made to the President of the University.
- U. The S. Ubukata Fund of \$10,000, the gift of Mr. S. Ubukata, provides for the establishment of prizes, medals, scholarships and loans for which Japanese students of all faculties and colleges may be eligible. Information regarding the conditions of award may be obtained from the Registrar of the University.
- U. The Robert Bruce Bursary of the value of \$100, founded from the estate of the late Robert Bruce of Quebec, is awarded annually to a student registered in any year in the Faculty of Arts or in the First Year in the Faculty of Medicine. The following regulations govern the award of this Bursary:
1. Until 1948 it shall be awarded only to students of Scottish extraction.
  2. All candidates must have complete Matriculation in this University as at the date of entrance.
  3. The award shall be based upon the candidate's academic record, consideration being given to his financial need.
  4. The Committee of Award shall consist of the President and the Deans of the Faculties of Arts, Medicine and Applied Science and Engineering.
  5. Applications for this Bursary shall be filed with the Registrar of the University on or before January 15th.
- U. Two Bursaries, known as "The F. W. Jarvis Bursaries", of the value of \$50 each, the gift of A. H. Jarvis, Esq., of Ottawa, brother of F. W. Jarvis, to be awarded under the following conditions:
1. These Bursaries are open only to former students of Ottawa Collegiate Institute (Lisgar Street), who without some such assistance may not be able to carry on their academic courses.
  2. They may be awarded at Matriculation or in any year of an undergraduate course in any Faculty of the University.
  3. They shall be awarded preferably one to a man and the other to a woman student; but if in any year students of opposite sexes do not apply, both Bursaries may be awarded to men or to women.
  4. A Bursary may be held in successive years by the same student and also in conjunction with any scholarship awarded by the University or the federated colleges.

5. The Bursaries shall be awarded by the Senate of the University on the recommendation of a Committee of Award consisting of the President of the University, the Principal of Ottawa Collegiate Institute and the donor; candidates shall make application for the same not later than May 15th on the special form to be obtained from the Registrar.
- V. The Massey Bursaries, provided by a bequest of the late W. E. H. Massey, Esq., will furnish a number of additional bursaries which are awarded under the terms of the will in aid of deserving students.
- V. The Mrs. Massey Treble Scholarship, the interest on an endowment of \$10,000, the bequest of the late Mrs. Lillian Frances Massey Treble, provides a scholarship for the assistance of meritorious young women engaged in the study of Household Science for use in missionary work. Awarded in 1919-1924 to Miss M. A. Caldwell; 1925, Miss A. K. Skinner, Miss F. A. Service and Miss M. E. Wilkinson; 1926, Miss F. A. Service and Miss M. E. Wilkinson.
- V. The John Trick and Susan Treble Trick Scholarships, each of the value of \$250 annually for four years, to be awarded to probationers for the ministry of the United Church of Canada to aid them in taking an Arts course; these scholarships are held on condition of residence in Burwash Hall.  
Awarded in 1924 to F. R. Vanberburgh and T. R. Turner; 1925, T. R. Turner and C. E. J. Cragg; 1926, H. B. Hendershot and W. H. Norman.
- V. The Rowell Scholarships, one of \$30 and one of \$20, the gift of the Hon. N. W. Rowell, K.C., LL.D., and Mrs. Rowell, open to all students of Victoria College, will be awarded annually to the students ranking first and second in Church History.  
Awarded in 1923 to R. S. Mills and Miss F. A. Anderson; 1924, A. J. Smale and Miss R. W. Haines; 1925, H. F. P. Grafton and C. Harris; 1926, Miss M. E. H. Adams.
- V. The Meacham Scholarship, the interest on an endowment of \$3,600, the gift of the late Rev. George M. Meacham, to be awarded to a student enrolled in Arts and Theology who has announced his intention to proceed to the foreign mission field; the choice to be made by the combined faculties of Arts and Theology.  
Awarded in 1924 to H. F. P. Grafton; 1925, W. H. H. Norman; 1926, C. E. J. Cragg.
- V. The Lincoln G. Hutton Scholarship, of the value of \$100, the gift of the late Mr. and Mrs. F. Hutton in memory of their son Lieutenant Lincoln G. Hutton, who fell in action in France on December 18th, 1916.  
Awarded in 1923 to Miss D. E. Toye; 1924, Miss M. M. Hutcheson; 1925, E. M. Gundy; 1926, Miss M. E. H. Adams.
- T. The late Ven. Archdeacon Nelles, of Brantford, left \$2,000 to Trinity College to be used for the assistance of students in Arts or Theology during their course in the College. Loans will be made from this fund to be repaid by the students after the completion of their College course. There are also other funds from which similar loans will be made.

## UNDERGRADUATE AND GRADUATE

## U. THE ALL SOULS' HISTORICAL ESSAY PRIZE

This prize, founded by two Fellows of All Souls' College, Oxford, is of the value of one hundred and fifty dollars. It is available every second year from 1910 and is awarded for research work in history of an original nature. Two subjects, one in Ancient History and one in Modern History, are announced but candidates may submit for the approval of the Board any subject in harmony with the purpose of the foundation. The Board consists of the President of the University, the Professor of History in the University and the Professor of Ancient History in University College. The prize is open to all undergraduates of the University and to graduates of not more than one year's standing from the date of awarding the prize. Should no essay be found worthy of the prize the Board may at its discretion devote the proceeds of the fund for that year to the encouragement of historical research.

Essays must be sent to the Registrar of the University on or before April 1, 1928; they must be accompanied by a motto or pseudonym, and by another and separate envelope containing the name of the candidate, the name of his college, and the month and year of his matriculation. Candidates are advised to have their essays typed, and to confine them to (approximately) 30,000 words.

The subject for 1928 is: The Idea of Liberty among the Romans *or* Sir Charles Bagot in Canada.

Awarded in 1912 to G. L. B. Mackenzie (*ob.*); 1914, W. F. Wallace; 1918, Miss M. G. Reid; 1926, C. P. Stacey.

## U. THE JARDINE MEMORIAL PRIZE FOR ENGLISH VERSE

1. This prize, of the value of \$100, is the gift of the late Mrs. T. Herbert Barton in memory of her brother Flight-Lieutenant Gordon Jardine, and is open to any regular undergraduate student who has been in actual attendance at the University during the academic year preceding the date of submission (November 1) or who graduated in the previous academic year.

2. The subject and metre of the poem shall be left to the choice of the competitor who may submit a series of sonnets or lyrics instead of a longer poem.

3. The poems shall be in the hands of the Registrar of the University by November 1st.

4. Each poem shall be signed with a pseudonym and the competitor's name shall be submitted to the Registrar in a sealed envelope on which the pseudonym shall be written.

5. With his or her name the competitor shall enclose a signed statement that the poem is absolutely his or her original work.

6. The competition shall be judged by a board of five examiners, consisting of the head of the Department of English in each of the four colleges, and of a fifth examiner to be chosen by these four.

7. The examiners shall have the power to withhold the award in any year if no poem which has been submitted for that year be found worthy of the prize.

Awarded in 1924 to R. D. C. Finch; 1926, N. A. Benson.

U. THE RAMSAY SCHOLARSHIP IN POLITICAL ECONOMY

This scholarship, of the value of \$60, is the gift of the late Mr. William Ramsay of Bowland, Scotland, and is open for competition to all graduates or undergraduates who have been placed in the first class in one of the Economic subjects of the Fourth Year in the honour department of Political Science; but not more than two years must have elapsed since the competitor passed the examination above specified. The award is made upon an essay, the subject of which must be some question in Economics or Finance, of interest to the commercial community in Canada, to be announced in May of each year and the competition closes on the 15th of September thereafter, by which date the essays must be in the hands of the Registrar of the University.

1927: The Credit System and Canadian Agriculture.

Authorities must be carefully stated in every case.

Awarded in 1926 to J. J. Robinette.

U. THE GEORGE PAXTON YOUNG MEMORIAL FELLOWSHIP IN PHILOSOPHY

This fellowship, of the value of \$300, will be awarded in June, 1927. The holder must be a Bachelor of Arts who has taken an honour course in Philosophy. This scholarship is tenable for one year, and the holder must devote his whole time to the study of some topic falling under the general term Philosophy. He may pursue his studies either in the University of Toronto, or in some other University approved by the Council of the Faculty; but in either case he shall furnish to the Council of the Faculty such evidence as may from time to time be required that he is faithfully observing the conditions under which the scholarship was awarded. Applications must be in the hands of the Registrar on or before June 15th, 1927. Further particulars may be obtained from the Registrar.

Those who have held the Young Fellowship are:—1897, M. A. Shaw, B.A., Ph.D.; 1899, G. J. Blewett, B.A., Ph.D. (*ob.*); 1899, R. J. Richardson, B.A. (*ob.*); 1901, F. S. Wrinch, B.A., Ph.D.; 1903, Miss M. A. Downing, B.A.; 1905, J. I. Hughes, B.A.; 1907, W. T. Brown, B.A., Ph.D.; 1911, J. R. Sanderson, M.A., Ph.D.; 1913, E. A. Bott, B.A.; 1915, C. A. Cowans, B.A.; 1917, no award; 1919, L. C. Harvey, B.A.; 1921, no award; 1923, S. J. Mathers, B.A.; 1925, C. G. Park, B.A.

U. THE MARION DICKENSON SCHOLARSHIP IN HOUSEHOLD SCIENCE

1. This Scholarship, of the value of \$500, has been founded from a bequest of the late Miss Marion Dickenson and will be offered in June 1928 and every second year thereafter; in case the scholarship

is not awarded in any prescribed year it may be awarded the following year and every second year thereafter.

2. The scholarship shall be awarded to a graduate in the Faculty of Arts who has obtained at graduation first class honours in Household Science or at least first class standing in the term work in that subject; a candidate who proposes to enter upon an academic career shall have preference.

3. The scholar shall undertake studies in Household Economics in Teachers College, Columbia University, New York, within three years after the award is made, but the Scholarship shall not be paid until after the scholar shall have regularly entered upon the course in Columbia University.

4. In the event of an award not being made in any prescribed year the Scholarship may in exceptional cases be granted for the second year to a previous holder.

5. The award shall be made by the Council of the Faculty of Arts on the recommendation of the President and the heads of the Departments of Household Science and Food Chemistry in the Faculty of Household Science.

These conditions are subject to change by the Senate and the Board of Governors.

This Scholarship is also open to certain students in the Faculty of Household Science.

Awarded in 1922 to Miss C. Valentine (resigned); 1923, Miss P. A. Robertson; 1924, Miss M. B. R. Fawcett (resigned); 1925, Miss F. I. Hargreaves and Miss E. A. Jerome (*aeq.*).

#### U. TUTORIAL FELLOWSHIPS

Tutorial Fellowships in Mathematics, Chemistry and Biology, are awarded annually. The selection is made from among graduates of the University. Each Fellow is appointed annually; but he may be reappointed for a period not exceeding, in all, three years.

Each Fellow is required to assist in the teaching and practical work of his department, under the direction of the professor or lecturer. The Fellows are selected with a special view to their aptitude for teaching and their attainments in the department in which the appointment is to be made. Every Fellow on accepting his appointment comes under an obligation to fulfil the duties of his Fellowship during the academic year in which he is appointed, unless specially exempted.

In the Departments of Psychology, Physics, Biology, Physiology, Chemistry and Mineralogy a number of Assistant Demonstrators and Class Assistants are appointed annually, whose appointments are made subject to the same conditions as those governing the Tutorial Fellowships. The annual remuneration attached to these positions varies according to the extent of the duties assigned to the appointees.

Candidates for the Fellowships must send their applications annually to the Registrar, not later than the first day of June.

## THE 1851 EXHIBITION SCIENCE RESEARCH SCHOLARSHIP

The Royal Commissioners for the Exhibition of 1851, if satisfied with the qualifications of the candidates put forward, will each year allot three Science Research Scholarships to Canada. The University of Toronto has been invited to recommend annually one or more candidates in order of merit for these Scholarships.

1. Each candidate recommended must be a British subject and under twenty-six years of age, except under very special circumstances; he must be a bona-fide student of Science of not less than three years' standing, he must also have completed a full University course and have spent at least one full academic year at this University prior to the date of recommendation.

2. The record of a candidate's work must indicate high promise of capacity for advancing science or its applications by original research. Evidence of this capacity, which is the main qualification for the Scholarship, is strictly required. The most suitable evidence is a satisfactory account by the candidate of Research work already performed, and the Commissioners will decline to consider the claims of a candidate unless such an account is furnished, or unless there is other equally distinct evidence that he possesses this qualification.

3. Applications for these Scholarships must be made to the Registrar of the University not later than April 15th; the latest date on which the recommendation of the University of Toronto for Scholarships offered in 1928 can be received at the Office of the Commissioners is June 1st, 1928.

4. Each Scholarship is of the value of £250 per annum, payable quarterly in advance; on presenting to the Commissioners a satisfactory final report at the expiration of his Scholarship the scholar will receive a grant of £25. A scholar who is not in a position to travel at his own expense, or for whom it is not possible to obtain free passage, may make application to the Commissioners for aid towards the payment of his fare from his home to his place of study. A Scholar will receive an additional annual allowance, not exceeding £30 towards the cost of University fees, if, in the opinion of the Commissioners, he is in need of such allowance.

5. The Scholarship will be tenable ordinarily for two years, and in cases of exceptional merit for three years. The continuation of a Scholarship for a second year will depend upon the satisfactory nature of the scholar's first year's work. Renewal for a third year will be granted only where it appears that the renewal is likely to result in work of scientific importance.

6. The scholar will be required to devote himself to research in some branch of pure or applied science, the particular nature of the work proposed to be approved by the Commissioners.

7. A scholarship may be held, with the approval of the Commissioners, at any Institution in the United Kingdom or abroad, but a scholar will not

be permitted, except under very special circumstances, to conduct his investigations in the country in which he has received his scientific education.

8. Scholars will be required to furnish reports of their work at the end of each year of tenure of their scholarships.

9. Scholars will be required to devote their whole time to the objects of the scholarship, and will be forbidden to hold any position of emolument which carries with it a duty inconsistent with their obligation to the Commissioners. Scholars must in any case obtain the consent of the Commissioners before accepting any additional emoluments.

10. In case of misconduct on the part of a scholar the Commissioners may, at their absolute discretion, deprive him of his scholarship and all emoluments therefrom.

The regulations adopted by the Senate are as follows:—

The departments, students of which shall be eligible to be candidates, are:—1. Bacteriology; 2. Biochemistry; 3. Botany; 4. Chemistry; 5. Engineering (chemical); 6. Engineering (civil); 7. Engineering (electrical); 8. Engineering (mechanical); 9. Engineering (metallurgical); 10. Engineering (mining); 11. Forestry; 12. Geology; 13. Mineralogy; 14. Physics; 15. Physiology; 16. Zoology.

A student shall not be deemed to be ineligible because of his being on the teaching staff of the University, if he has not been in receipt of a salary of more than \$800 per annum and has not been on the teaching staff for more than two years from graduation.

A student shall be deemed to be eligible in the year in which he intends to graduate, but if nominated for the Scholarship his nomination shall be subject to his being successful in passing his examination for his degree.

The nomination of the candidate or candidates shall be made by a Board composed of seven members appointed by the Senate, and the Board shall consist of the Chancellor, the President, the Reverend Dr. Bowles, the Honourable Mr. Justice Masten, the Honourable W. E. Raney, Dr. J. A. Worrell and Dr. C. Morse, and the Board shall have power to call to its aid as assessor any member of the teaching staff.

The 1851 Exhibition Science Research scholars:—

F. J. Smale, B.A., Ph.D., 1892-93, 1893-94, 1894-95.

F. B. Kenrick, M.A., Ph.D., 1894-95, 1895-96, 1896-97.

A. M. Scott, B.A., Ph.D., 1896-97, 1897-98.

W. G. Smeaton, B.A., Ph.D., 1898-99, 1899-1900.

J. Patterson, B.A., 1900-01, 1901-02.

W. C. Bray, B.A., 1902-03, 1903-04.

E. F. Burton, Ph.D., 1904-05, 1905-06.

R. H. Clark, M.A., 1906-07, 1907-08.

C. S. Wright, M.A., 1908-09, 1909-10.

W. P. Thompson, B.A., 1910-11, 1911-12.

- A. J. Dempster, M.A., 1912-13, 1913-14.  
A. R. McLeod, M.A., 1914-15 (Bursary).  
1916, 1918, 1919, no awards.  
A. L. Marshall, M.A., 1920-21, 1921-22.  
J. M. Luck, B.A., 1922-23, 1923-24, 1924-25.  
W. L. Webster, B.A., 1923-24, 1924-25.  
G. I. Hoover, B.A., 1924-25, 1925-26.  
C. S. Hanes, B.A., 1925-26, 1926-27.

#### THE McCHARLES PRIZE

This prize was established in connection with the bequest of the late Æneas McCharles of Provincial Government bonds of the value of \$10,000, and is awarded on the following terms and conditions, namely, that the interest therefrom shall be given from time to time, but not necessarily every year, like the Nobel prizes in a small way: (1) To any Canadian from one end of the country to the other, and whether student or not, who invents or discovers any new and improved process for the treatment of Canadian ores or minerals of any kind, after such process has been proved to be of special merit on a practical scale; (2) Or for any important discovery, invention or device by any Canadian that will lessen the dangers and loss of life in connection with the use of electricity in supplying power and light; (3) Or for any marked public distinction achieved by any Canadian in scientific research in any useful practical line. The following conditions, as passed by the Board of Governors, determine the method of award:—

- (1) The title shall be the McCharles Prize.
- (2) The value of the prize shall be One Thousand Dollars (\$1,000.00) in money.
- (3) The term "Canadian" for the purpose of this award shall mean any person Canadian born who has not renounced British alliance; and for the purpose of the award in the first of the three cases provided for by the bequest, domicile in Canada shall be an essential condition.
- (4) Every candidate for the prize shall be proposed as such in writing by some duly qualified person. A direct application for a prize shall not be considered.
- (5) No prize shall be awarded to any discovery or invention unless the same shall have been proved to the satisfaction of the awarding body, to possess the special practical merit indicated by the terms of the bequest.
- (6) The order of priority in which the three cases stand in the wording of the bequest shall be observed in making the award; that is, the award shall go *caeteris paribus* to the inventor of methods of smelting Canadian ores; and, failing such inventions, to the inventor of methods for lessening the dangers attendant upon the use of electricity; and only in the third



event, if no inventors of sufficient merit in the field of metallurgy and electricity present themselves, to the inventor distinguished in the general field of useful scientific research.

(7) The first award was made in 1910.

(8) The composition of the awarding body shall be as follows:—

An expert in Mineralogy,

An expert in Electricity,

An expert in Physics,

and four other persons. All of the members of this body shall be nominated by the Board of Governors of the University of Toronto.

#### THE UNIVERSITY OF TORONTO WAR MEMORIAL SCHOLARSHIPS

Two scholarships, each of the value of \$200, have been established by the Alumni Federation of the University from the War Memorial Fund to be awarded to students in the Faculty of Arts.

Three Gordon Southam Scholarships, each of the value of \$200, one to be awarded at the end of each of the first three years, have also been established, the gift of the Southam family in memory of Gordon Hamilton Southam, B.A. '07, University College, Major Commanding 40th Battery, C.F.A., killed in action October 15th, 1916. These Scholarships are open for competition to students of University College only.

The general basis on which the above scholarships may be awarded is as follows:

(a) Standing in course of studies.

(b) Need of assistance.

(c) Merit as shown in extra-academic activities—executive, literary, dramatic, athletic, etc.

(d) Relationship, if any, to active service during the War.

Information regarding these scholarships may be obtained from the Secretary-Treasurer of the Alumni Federation, Room 225, Simcoe Hall, to whom applications for the same must be made.

#### THE JOHN H. MOSS MEMORIAL FUND

The John H. Moss Memorial Fund, the gift of friends of the late John H. Moss, B.A., K.C., is intended to provide the annual sum of \$300 to be awarded under the following regulations:

1. The graduating class in Arts in each of University College, Victoria College, Trinity College, and St. Michael's College, shall select by vote the student whom they regard as the best all-round man or woman in the final year, giving preference during the first ten years to former members of the Canadian Expeditionary Force, or failing them, to children, brothers or sisters of such former members, or of Canadian officers or men who served at home during the War.

2. The Secretary-Treasurer of the Alumni Federation of the University of Toronto shall notify the Heads of Colleges that the nominations must be made by students in their final year by March 1st, if possible, in order that the Committee of Award may interview the various candidates selected not later than April 1st.

3. The award shall be made to one of the four students so selected by a Committee of Award consisting of the President of the University, the President of the Alumni Federation, and three of its members.

4. In making the award there shall be taken into consideration a report from the Head of the College as to the character and standing of the candidate with a report from the Registrar of the University as to his or her academic standing.

5. In determining the award the Committee shall give preference, if possible, to the candidate who is likely to engage in postgraduate or professional work or preparation therefor or travel abroad in the year following his graduation.

6. The award shall be announced and payment made at the time of Commencement in June.

7. The regulations under which the Fund shall be administered, the candidates selected and the award made, may be amended from time to time by the Alumni Federation, or Committee thereof with the approval of the President of the University.

Awarded in 1923 to J. G. Endicott, Victoria College, and Miss M. A. Pickford, Trinity College (additional grant); 1924, M. C. O'Neill, St. Michael's College, by reversion to Miss A. M. Hilliard, Victoria College; 1925, Miss A. N. Wilson, Trinity College; 1926, Miss N. C. Story, St. Michael's College.

#### THE RHODES SCHOLARSHIP

The trustees of the late Mr. C. J. Rhodes have assigned two of the Rhodes Scholarships to the Province of Ontario.

These scholarships will hereafter be thrown into open competition in the Province, subject to the following conditions:—

1. Candidates must be British subjects, with at least five years' domicile in Canada, and unmarried. They must have passed their nineteenth, but not have passed their twenty-fifth birthday, on October 1st of the year for which they are elected.

2. Candidates must be at least in their Sophomore Year at some recognized degree-granting University or College of Canada, and (if elected) complete the work of that year before coming into residence at Oxford.

3. Candidates may compete either in the Province in which they have acquired any considerable part of their educational qualification, or in the Province in which they have their ordinary private domicile, home or residence.

In each Province there is a Committee of Selection, appointed by the Trustees, in whose hands the nominations will rest. The Secretary of the Committee of Selection for Ontario is D. R. Michener, Esq., Barrister, Continental Life Building, Toronto.

The Committees of Selection are instructed to bear in mind the suggestions of Mr. Rhodes, who wished that, in the choice of his Scholars, regard should be had to

- (a) Force of character, devotion to duty, courage, sympathy, capacity for leadership.
- (b) Ability and scholastic attainments.
- (c) Physical vigor, as shown by participation in games or in other ways.

Every candidate for a Scholarship is required to furnish to the Committee of Selection for his Province the following:—

- (a) A certificate of age.
- (b) A photograph preferably unmounted and not larger than 4×7 inches.
- (c) A written statement from the President or Acting President of his College or University to the effect that his application as a suitable candidate is approved.
- (d) Certified evidence as to the courses of study pursued by the Scholar at his University, and as to his gradings in those courses. This evidence should be signed by the Registrar, or other responsible official, of his University.
- (e) A brief statement by himself of his athletic and general activities and interests at College, and of his proposed line of study at Oxford.
- (f) Not more than four testimonials from persons well acquainted with him.
- (g) References to four other responsible persons, whose addresses must be given in full, and of whom two at least must be professors under whom he has studied.
- (h) A medical certificate.

It is in the power of the Committee of Selection to summon to a personal interview such of the candidates as they find desirable to see, and, save under exceptional circumstances, no Scholar will be elected without such an interview. Where such an interview is dispensed with, a written statement of the reasons will be submitted to the Trustees.

The next appointments will be made for 1928; applications for these Scholarships with all required material must reach the Secretary of the Committee of Selection not later than October 20th, 1927.

Each Scholarship is of the value of £400 a year, and is tenable for three years, subject to the continued approval of the College at Oxford of which the Scholar is a member.

The Scholars-elect will come into residence in October of the year for which they are elected.

Students who have obtained the B.A. degree at the University of Toronto, provided that they have resided three years at this University, may apply for "Senior Standing" at Oxford, exempting them from all preliminary and intermediate examinations, and making it possible for them to take their Final Honour Schools, and B.A. degree, in two years.

Students who have resided two years at a Canadian University, and passed the examinations incident to a two years' course which has included two languages other than English, one of which must have been either Latin or Greek, may apply for Junior Standing at Oxford, which carries with it exemption from Responsions, but not from the intermediate examination. They can proceed to their B.A. degree in two years, provided that they obtain Honours either in Moderations or in the Final Honour Schools. Greek is no longer an obligatory subject at Oxford.

It must be realized that £400 will barely meet the expenses of a full year, including vacations. Scholars will probably find it necessary to supplement their Scholarships slightly.

The Rhodes Scholars elected by this University previous to 1919 are as follows:—

- 1904: E. R. Paterson, University College. (*ob.*)
- 1906: R. C. Reade, University College.
- 1908: W. K. Fraser, University College.
- 1910: A. L. Burt, Victoria College.
- 1913: C. H. Carruthers, University College.
- 1915: A. K. Griffin, Trinity College.

The following Rhodes Scholars, students of this University, have been nominated by the Committee of Selection for Ontario and duly appointed by the Rhodes Trust:—

- 1919: M. D. C. Tait, University College.
- 1920: J. R. Stirrett, University College.
- 1921: J. Lowe, Trinity College.
- 1923: N. J. Endicott, Victoria College.
- 1924: L. A. MacKay, University College.
- 1925: D. W. Dow, Faculty of Applied Science and Engineering.
- 1927: E. M. Reid, Trinity College.

#### THE EDWARD KYLIE AWARD

A permanent foundation known as the "Edward Kylie Trust" was established in 1921 by friends of the late Edward J. Kylie, M.A., of the Department of Modern History, as a memorial to him. The income from this fund is used by the Trustees for the purpose of making an award from time to time to a student in Arts, preferably in the Modern History Course, to enable him to pursue his studies in Great Britain.

Applications should be addressed "The Secretary, The Edward Kylie Trust", and forwarded, before the first of May in each year, through the Registrar of the University, from whom further information can be secured.

Awarded in 1921 to F. H. Soward; 1925 and 1926, D. G. Creighton.

## THE LEONARD SCHOLARSHIP

The Leonard Scholarship, of the value of \$60, is the gift of C. J. Leonard, Esq. in memory of his son, Lieutenant John Leonard, M.C. The award is made on the nomination of the Rector of Newman Hall to a member of the Newman Club registered in the First Year of the Honour Course in English and History.

## DAUGHTERS OF THE EMPIRE OVERSEAS SCHOLARSHIP

As part of their War Memorial, the Imperial Order Daughters of the Empire offer each province of Canada a scholarship for post-graduate study in Britain. This scholarship is offered in each province each year; it will be next awarded to an Ontario candidate in 1927, for study during the academic year of 1928-1929. The value of the scholarship is \$1,400 for one year.

These scholarships are subject to the following conditions:

(1) Candidates may be men or women. They must be British subjects, with at least five years' residence in Canada, and unmarried. Except in the case of a returned soldier, sailor or airman, he must have passed his 19th but not his 27th birthday in October of the year in which he begins his work in Britain. Each candidate must either hold a degree from a University or College in the province in which he or she is making application, or be in his or her final year in a course proceeding to a degree.

(2) In each province a committee of selection will award the scholarship. Other things being equal, preference will be given to a returned man, his sister, son or daughter. The committee will consider not only the academic record of the candidate, but his or her character, physical fitness, and promise.

(3) Applications for this scholarship should be sent before October 1927 to the Provincial Educational Secretary, I.O.D.E., Y.W.C.A. Building, Hamilton, Ontario, who will provide additional information about the scholarship.

(4) Students from Prince Edward Island are not eligible for this Ontario scholarship, but are eligible for the Prince Edward Island scholarship.

## FEDERATION SCHOLARSHIP

The Scholarship of the Canadian Federation of University Women, of the value of \$1,250, available for study or research work, is open to any woman holding a degree from a Canadian University. In general, preference will be given to those candidates who have completed at least one or two years at graduate study and have a definite research or plan of study in view. The award is based on evidence of character and ability of the candidate and promise of success in the subject to which she is devoting herself.

The choice of the University at which the successful candidate shall pursue her study or research work is left to the Committee of Selection in consultation with the candidate.

There are no application blanks and application is made by letter to the Convener of the Scholarship Committee, Mrs. Douglas J. Thom, 2220 College Ave., Regina, Sask., from whom further information may be obtained.

Applications and recommendations must be received not later than February 1st. None can be accepted after that date.

## COURSES OF INSTRUCTION

The members of the staff indicated under the headings "The Classics", etc., in the following pages, are those of the Session 1926-1927.

### THE CLASSICS

#### UNIVERSITY COLLEGE:

M. HUTTON, M.A., LL.D.....	<i>Professor of Greek.</i>
J. MACNAUGHTON, M.A., LL.D.....	<i>Professor Emeritus.</i>
A. CARRUTHERS, M.A.....	<i>Professor Emeritus.</i>
G. NORWOOD, M.A.....	<i>Professor of Latin.</i>
W. S. MILNER, M.A.....	<i>Professor of Greek and Roman History.</i>
G. O. SMITH, M.A.....	<i>Associate Professor of Latin.</i>
C. N. COCHRANE, M.A.....	<i>Associate Professor of Ancient History.</i>
E. A. DALE, M.A.....	<i>Associate Professor of Latin.</i>
E. T. OWEN, M.A.....	<i>Associate Professor of Greek.</i>
D. E. HAMILTON, M.A., D.PAED.....	<i>Associate Professor of Greek.</i>
A. G. BROWN, M.A.....	<i>Associate Professor of Ancient History.</i>
D. DUFF, M.A., B.D.....	<i>Associate Professor of Latin.</i>
MISS E. HARRIS, M.A.....	<i>Lecturer in Latin.</i>

#### VICTORIA COLLEGE:

A. J. BELL, M.A., PH.D.....	<i>Professor Emeritus.</i>
J. C. ROBERTSON, M.A.....	<i>Professor of Greek.</i>
N. W. DEWITT, B.A., PH.D.....	<i>Professor of Latin.</i>
C. B. SISSONS, B.A., LL.D.....	<i>Professor of Ancient History.</i>
H. G. ROBERTSON, B.A., PH.D.....	<i>Lecturer.</i>
M. M. WESTINGTON, M.A.....	<i>Instructor in Latin.</i>
MISS R. I. JENKING, B.A.....	<i>Fellow in Ancient History.</i>

#### TRINITY COLLEGE:

REV. H. T. F. DUCKWORTH, M.A.....	<i>Professor of Ancient History.</i>
W. A. KIRKWOOD, M.A., PH.D.....	<i>Professor of Latin.</i>
J. N. WOODCOCK, M.A.....	<i>Professor of Latin.</i>
S. M. ADAMS, M.A.....	<i>Associate Professor of Greek.</i>

#### ST. MICHAEL'S COLLEGE:

REV. H. CARR, B.A., LL.D.....	<i>Professor of Greek.</i>
REV. R. McBRADY.....	<i>Professor of Latin.</i>
REV. J. T. MUCKLE, M.A.....	<i>Professor of Latin.</i>
REV. J. B. WALSH, M.A.....	<i>Associate Professor of Latin.</i>
M. ESTELLE, M.A.....	<i>Lecturer in Latin.</i>
M. ST. JOHN, M.A.....	<i>Lecturer in Latin.</i>
REV. W. B. O'TOOLE, B.A.....	<i>Lecturer in Greek.</i>

N.B.—The following books are recommended for the use of all students taking work in the Classical Department: Dictionaries: Greek—LIDDELL AND SCOTT, *Greek-English Lexicon* (unabridged or intermediate size); Latin—LEWIS AND SHORT, *A Latin Dictionary* (unabridged or intermediate size); Grammars: Greek—GOODWIN or SMYTH, *Greek Grammar*; Latin—ALLEN AND GREENOUGH or GILDERSLEEVE AND LODGE, *Latin Grammar*, Histories of Literature: Greek—GILBERT MURRAY or WRIGHT; Latin—MACKAIL, *Latin Literature*; Atlases: MURRAY, *Classical Atlas* or *The Atlas of Ancient and Classical Geography* in Everyman's Library.

## GREEK

### PASS COURSES

1a. Translation at sight of easy narrative prose; Greek Grammar (including sentences to test accidence and syntax); NORTH AND HILLARD, *Greek Prose Composition*, Exercises A, pages 1-85; FARNELL, *Tales from Herodotus*. Four hours a week.

1b. HILLARD AND BOTTING, *Elementary Greek Translation Book*. Four hours a week.

(This course may be taken only by those specially recommended by their College, and the course must be continued through all four years.)

2a. Translation at sight of easy passages of Greek; Greek Grammar; translation from English into Greek of sentences based on NORTH AND HILLARD, *Greek Prose Composition*, pages 1-155 inclusive; EURIPIDES, *Medea*; THUCYDIDES, I. Chap., 89-117, 128-138 both inclusive. Three hours a week.

2b. FREEMAN, *Scenes from the Trojan War*; FREEMAN AND LOWE, *Greek Reader*; Translation at sight. Three hours a week. (This course is for those who have completed 1b.)

3a. PURVES, *Selections from Plato* (approximately sixty pages); Translation at sight. To be read in English: additional prescribed portions of Plato; THUCYDIDES, *Pericles' Funeral Speech*; DEMOSTHENES, *Philippic I*. DICKINSON, *Greek View of Life*; GRANT, *Age of Pericles*. Three hours a week.

4a. History of Greek Poetry (JEBB, *Classical Greek Poetry*), with reading of HOMER, *Iliad* I, 1-350, VI, 237 to end, XXII, in Greek; and *Odyssey* in translation (BUTCHER and LANG); AESCHYLUS, *Agamemnon*, in translation (MORSHEAD); SOPHOCLES, *Oedipus Rex*, in Greek; EURIPIDES, *Iphigenia in Tauris* and *Hippolytus*, in translation (MURRAY); ARISTOPHANES, *Frogs*, in translation (ROGERS); translation at sight; LIVINGSTONE, *The Greek Genius and its Meaning to us*. Three hours a week.



## HONOUR COURSES

1c. *Classics*: Grammar; translation at sight; prose composition; HOMER, *Iliad* IX, XVIII, XXII; EURIPIDES, *Medea*; PLATO, *Apology*; THUCYDIDES, I, 89-117, 128-138; DEMOSTHENES, *Philippic* I, *Olynthiacs* I, III. Five hours a week.

1d. *English and History*: The same as 1c, omitting DEMOSTHENES. Four hours a week.

1e. *French Greek and Latin*: The same as 1c, omitting DEMOSTHENES. Four and a half hours a week.

1f. *Philosophy, Philosophy (English or History Option)*: prose composition, PLATO and THUCYDIDES, as in 1c. Four hours a week.

2c. *Classics*: Grammar; translation at sight; prose composition; ARISTOPHANES, *Birds*, *Clouds*; HOMER, *Iliad*; THUCYDIDES IV, 1-41, 58-65, 76-108; JEBB, *Classical Greek Poetry*. Five hours a week.

2d. *English and History*: The same as 2c, omitting Greek Grammar, THUCYDIDES, IV, 76-108, and ARISTOPHANES. Four hours a week.

2e. *French Greek and Latin*: The same as 2c, omitting THUCYDIDES, IV, 76-108, and ARISTOPHANES. Four hours and a half a week.

2f. *Hellenistic Greek*: CONYBEARE AND STOCK, *Selections from the Septuagint*. One hour a week.

3b. *Classics*: Grammar; translation at sight; prose composition; HERODOTUS, VII, VIII, IX; THUCYDIDES, I, II; SOPHOCLES, *Œdipus Rex*, *Antigone*; PLATO, *Republic* I-IV; ARISTOTLE, *Ethics* I-IV, X (6-9); ancient philosophy including (a) Greek speculative theories before Socrates, (b) Socrates and his contemporaries, (c) the doctrines of Plato and Aristotle: an elementary course with special reference to the prescribed texts, and in addition to the Greek texts here prescribed the student should read GROTE, *History of Greece*, Chapters LXVII and LXVIII, and CUSHMAN, *Beginner's History of Philosophy*, or ROGERS, *Student's History of Philosophy*. Seven hours a week.

3c. *English and History*: PLATO, as in 3b. Two hours a week.

3d. *English and History (Special Option)*: ARISTOTLE, as in 3b. One hour a week.

3e. *Greek and Hebrew*: PLATO, ARISTOTLE, and History of Greek Philosophy, as in 3b. Four hours a week.

3f. *French Greek and Latin*: The same as 3b, omitting HERODOTUS. Six hours a week.

3g. *Hellenistic Greek*; Grammar and Philology; *I Maccabees*; *The Wisdom of Solomon*; Selections from LUCIAN. One hour a week.

8h. *Essays on prescribed topics*.

4b. *Classics*: Historical grammar of Greek and Latin; translation at sight; prose composition; THUCYDIDES, III, IV, V (84 to end), VI, VII; PLATO, *Republic*; ARISTOTLE, *Politics* (selections), *Poetics* (with the history of the Greek genius and Greek poetry); AESCHYLUS, *Agamemnon*, *Prometheus Vincit*. Seven hours a week.

4c. *English and History*: ARISTOTLE, *Poetics* (in translation). One hour a week.

4d. *English and History (Special Option)*: PLATO, *Republic* as in 4b. One hour a week.

4e. *Greek and Hebrew*: PLATO, *Republic*; History of Philosophy with special reference to Philo, Neo-Platonism, and the Stoicism of the Empire. Three hours a week.

4f. *French, Greek and Latin*: The same as 4b, omitting THUCYDIDES. Six hours a week.

4g. *Hellenistic Greek*: Grammar and Philology; ARISTAEUS; Selections from Patristic Literature. Two hours a week.

4h. A course of reading to be approved by the Department, with essays on prescribed topics.

## LATIN

### PASS COURSES

1a. Translation at sight of Latin similar to the prescribed Cicero; translation into Latin of sentences based on the prescribed Cicero; translation of passages from the prescribed Horace; questions on grammar and prosody, and on the subject-matter of the prescribed texts; CICERO, *Pro Lege Manilia*; HORACE, selected *Odes*. Four hours a week.

2a. Translation at sight of Latin similar to the prescribed Livy; translation into Latin of sentences to illustrate Latin syntax; translation into Latin of simple narrative based on the prescribed Livy; translation of passages from the prescribed Catullus; questions on grammar and prosody and on the subject-matter of the prescribed texts; LIVY, Selections from Books I-X (Dennison, sixty pages); CATULLUS (Simpson). Three hours a week.

3a. *Course for 1927-1928*: Grammar; translation at sight; prose composition; TACITUS, *Agricola*; HORACE, *Epistles* I, omitting 17 and 18; JUVENAL, *Satires* I, III, X; PLINY, *The Death of the Elder Pliny*, *The Eruption of Vesuvius*, *The Christians*, *Trajan's Reply on the Christians*; BAILEY, *The Legacy of Rome*, omitting pp. 325-427. Three hours a week.

3a. *Course for 1928-1929*: Grammar; translation at sight; prose composition; CICERO, *Pro Archia*; VIRGIL, *Eclogues* I, IV, VI, VIII, *Aeneid* VI; PLINY, selected *Letters* (Prichard and Bernard); MACKAIL, *History of Latin Literature*; BAILEY, *The Legacy of Rome*, pp. 325-427. Three hours a week.

4a. Same as 3a. Three hours a week.

NOTE 1. Students of the Fourth Year who have not passed in the Latin of their Third Year will be required at the B.A. examination of 1924 to take an additional paper on the work of the alternative course.

NOTE 2. Students of the Fourth Year who, through absence from the University, have not taken the two Latin courses in consecutive years will, at their Final Examination, be required to take the paper on the authors prescribed in 3a which they did not take in their Third Year.

### HONOUR COURSES

1b. *Classics*: Grammar, including prosody; translation at sight; prose composition; CATULLUS (Simpson); VIRGIL, *Georgics* I, IV; HORACE, *Odes* (selected); CICERO, *Philippic* II, *Pro Archia*, *De Amicitia*. Four to five hours a week.

1c. *English and History*: The same as 1b, omitting VIRGIL, *Georgics* I and CICERO, *Philippic* II. Four hours a week.

1d. *French, Greek and Latin*: The same as 1b, omitting VIRGIL, *Georgics* I. Four hours and a half a week.

2b. *Classics*: Grammar; translation at sight; prose composition; PLAUTUS, *Captivi*; TERENCE, *Adelphi*; VIRGIL, *Aeneid* I-VI; LIVY, XXI; with additional translation from Livy at sight; TACITUS, *Agricola*; MACKAIL, *History of Latin Literature*. Five to six hours a week.

2c. *English and History*: The same as 2b, omitting Latin Grammar, VIRGIL, *Aeneid* I-III, and LIVY. Three hours a week.

2d. *French, Greek and Latin*: The same as 2b. Four hours and a half a week.

3b. *Classics*: Grammar; translation at sight; prose composition; CICERO, *Letters* (How); CAESAR, *Civil War* I; SALLUST, *Catiline*; VIRGIL, *Aeneid* VII-XII; HORACE, *Epistles* (selected), *Satires* (selected); LUCRETIVUS V and selections from I. Six hours a week.

3c. *English and History*: HORACE and LUCRETIVUS as in 3b. Two hours a week.

3d. *English and History* (special option): CICERO, CAESAR and SALLUST as in 3b. One hour a week.

3e. *French, Greek and Latin*: The same as 3b, omitting CICERO. Five hours a week.

3f. Essays on prescribed topics.

4b. *Classics*: Historical grammar of Greek and Latin; translation at sight; prose composition; CICERO, *Letters* (How); CAESAR, *Civil War*; HORACE, *Ars poetica*; QUINTILIAN X; TACITUS, *Annals* I-VI; JUVENAL, *Satires* I, III, VII, X; MARTIAL (selections); history of post-Aristotelian philosophy. Five hours a week.

4c. *English and History*: CICERO and CAESAR as in 4b. Two hours a week.

4d. *French, Greek and Latin*: The same as 4b, omitting historical grammar and CICERO, and adding BROWNIGG, *Latin Prose of the Silver Age* (selections); LUCAN, Book VIII; SENECA, *Hercules Furens*.

4e. A course of reading to be approved by the Department, with essays on prescribed topics.

4f. Archaeology: Greek and Roman Private Life.

## GREEK AND ROMAN HISTORY

### PASS AND HONOUR COURSE

1. General History of Greece to 146 B.C. General History of Rome to A.D. 476. GOODSPEED, *History of the Ancient World*; BURY, *Student's History of Greece* (Kimball); PELHAM, *Outlines of Roman History*. The course aims at a simple outline of the general historical movement in the Græco-Roman world and at an appreciation of the most characteristic features of Mediterranean civilization.

### PASS COURSES

2a. A more mature study of Greek History based on Herodotus, Thucydides and Plutarch.

3a. Criticism of the City state, the Greek philosophers, Hellenism; the Roman Empire from the period of the Great Wars to the death of Caesar, and the influence of Greece on Rome.

4a. The Empire from Augustus to Justinian, Græco-Roman Civilization; Christianity in the Roman Empire.

### HONOUR COURSES

2b. The city-state of the Greeks and Romans.

3b. Greek History to 431 B.C.

3c. Roman History from 133 B.C. to 49 B.C.

4b. Greek History from 431 B.C. to 399 B.C.; general questions on Greek History.

4c. Roman History from 49 B.C. to 37 A.D.

4d. Roman Institutions: GREENIDGE, *Roman Public Life*; WARDE FOWLER, *The Religious Experience of the Roman People*; DELOUME, *Les Manieurs d'argent à Rome*; SALVIOLI, *Capitalisme*.

## ORIENTAL LANGUAGES

### UNIVERSITY COLLEGE:

J. F. McCURDY, PH.D., LL.D. . . . . *Professor Emeritus.*

W. R. TAYLOR, M.A., PH.D. . . . . *Professor.*

T. J. MEEK, B.A., B.D., PH.D. . . . . *Professor.*

W. A. IRWIN, M.A., D.B., PH.D. . . . . *Assistant Professor.*

F. V. WINNETT, M.A. . . . . *Fellow.*

VICTORIA COLLEGE:

REV. J. F. McLAUGHLIN, B.A., D.D.....*Professor.*  
 REV. W. A. POTTER, M.A., B.D.....*Professor.*

TRINITY COLLEGE:

REV. S. A. B. MERCER, M.A., Ph.D., D.D.....*Professor.*  
 REV. W. ROLLO, M.A.....*Lecturer.*

PASS COURSES

1a. A course in the history of the Hebrew people from the Exodus to 586 B.C.; a literary study of the books of Amos, Hosea, Isaiah and Micah. One hour a week.

1b. Hebrew Grammar; translation from Hebrew into English of Gen. 1-4, 18; Pss. 1, 8, 24; translation from English into Hebrew. DAVIDSON, *Hebrew Grammar*; KITTEL, *Biblia Hebraica*. Four hours a week.

2a. A course in the history of the Hebrew people from 626 to 4 B.C.; a study in the Prophetic, Legal and Historical Literature of the Old Testament. Two hours a week.

2b. Hebrew Grammar with special attention to syntax; translation from English into Hebrew; translation into English of *Genesis* 6-8, 11-12, 27; *Ex.* 3, 4; *Judges* 13-18; *Ruth*; *Jonah* 1, 3, 4; history of the Massoretic Text and the Versions; outlines of the geography of Palestine; the background of Hebrew history: BREASTED, *Ancient Times*, pp. 35-130, 197-213; DAVIDSON, *Hebrew Grammar*; KITTEL, *Biblia Hebraica*; BROWN, DRIVER AND BRIGGS, *Lexicon*. Three hours a week.

3a. A literary study of the Poetical books of the Old Testament and of the Synoptic Gospels. Three hours a week.

3b. Translation from English into Hebrew; Hebrew history from the settlement in Canaan to the end of the Kingdom (586 B.C.). Translation into English of *Amos*; *Zephaniah* 1; *Jeremiah* 1, 7, 26; *II Kings* 15-25; *Deuteronomy* 5-13; KITTEL, *Biblia Hebraica*; GESENIUS-KAUTZSCH, *Hebrew Grammar*; DAVIDSON, *Hebrew Syntax*; BROWN, DRIVER AND BRIGGS, *Lexicon*; G. W. WADE, *Old Testament History*; H. P. SMITH, *Old Testament History*. Three hours a week.

4a. A literary and historical study of Christianity and of its fore-runners. Three hours a week.

4b. Translation from English into Hebrew; characteristics of Hebrew poetry; Jewish history from the fall of Jerusalem 586 B.C. to the end of the Maccabaeen period. Translation into English of selected *Psalms*, 100, 95, 24, 15, 48, 87, 114, 81, 147, 148, 150, 46, 47, 93, 97, 8, 19, 29, 103, 104, 65, 67, 118, 21, 116, 30, 74, 89, 90, 20, 72, 42, 43, 22, 51, 137, 84, 122, 110, 107, 23, 78, 127, 133, 45; *Zechariah* 1-8; *Prov.* 1, 3, 8; *II Chronicles* 1-9; KITTEL, *Biblia Hebraica*; DAVIDSON, *Hebrew Syntax*; GESENIUS-KAUTZSCH, *Hebrew Grammar*; KENT, *History of the Jewish People*, Vols. III and IV. Three hours a week.

## HONOUR COURSES

2c. *Orientalis, Greek and Hebrew*: The same as 2b. Hebrew prose exercises. DAVIDSON, *Hebrew Grammar*; DAVIDSON, *Hebrew Syntax*. Three hours a week.

2d. *Orientalis, Greek and Hebrew*: Translation into English of *Judges* 1-12; *I Sam.* 9-10. Two hours a week.

2e. *Orientalis*: Translation into English of *Exodus* 5-12, 18-21, 34 vv. 14-27; *Lev.* 8-10; *Deut.* 15-18; outlines of Hexateuchal Problems. Two hours a week.

2f. *Orientalis*: Aramaic Grammar with translation of extracts from Targums of Onkelos and from Daniel and Ezra; MARTI, *Biblich-Aramäische Grammatik*; W. R. STEVENSON, *Aramaic Grammar*. Introduction to Syriac Grammar. ROBINSON, *Syriac Grammar*. Two hours a week.

3c. *Orientalis, Greek and Hebrew*: Translation into English, the same as 3b. Three hours a week.

3d. *Orientalis, Greek and Hebrew*: Translation into English of selections from *Isaiah* 1-39. Two hours a week.

3e. *Orientalis*: Translation into English of selections from *Jeremiah*, *Ezekiel*, and the Minor Prophets. Two hours a week.

3f. *Orientalis, Greek and Hebrew*: Hebrew prose composition and sight translation. GESENIUS-KAUTZSCH, *Hebrew Grammar*. One hour a week.

3g. *Orientalis*: Arabic First Course; THATCHER, *Arabic Grammar* with exercises in translating easy prose into English. Two hours a week.

3h. *Orientalis*: Advanced course in Aramaic or Syriac. ROBINSON, *Syriac Grammar*; BROCKELMANN, *Syrische Grammatik*. Two hours a week.

3i. *Orientalis*: Elements of Assyrian; FR. DELITZSCH, *Assyrische Lese-stücke*. Two hours a week.

4c. *Orientalis, Greek and Hebrew*: Translation into English, the same as 4b. Three hours a week.

4d. *Orientalis, Greek and Hebrew*: Translation into English of selections from *Job*, *Proverbs* and *Ecclesiastes*. One hour a week.

4e. *Orientalis*: Selections from Late Biblical or Post-Biblical Hebrew. One hour a week.

4f. *Orientalis, Greek and Hebrew*. Hebrew prose composition and sight translation. DAVIDSON, *Hebrew Syntax*. One hour a week.

4g. *Orientalis*: Arabic Second Course; THATCHER, *Arabic Grammar* (continued); BRÜNNOW-FISCHER, *Chrestomathy of Arabic Prose Selections*; HARDER, *Arabic Chrestomathy*. Two hours a week.

4h. *Orientalis*: Advanced course in Aramaic or Syriac; NÖLDEKE, *Syriac Grammar*; *Selected Texts*. Two hours a week.

4i. *Orientalis*: Advanced course in Assyrian. Inscriptions of Sennacherib, Sargon, Ashurbanipal. Two hours a week.

# ANCIENT ORIENTAL HISTORY

## PASS COURSES

2a. History of Egypt, Babylonia, Assyria, Palestine and related lands down to 612 B.C. Two hours a week.

3a. History of the Near East, continuing 2a, from 612 B.C. to 63 B.C. Two hours a week.

4a. History of the Near East, from 63 B.C. to the present. Two hours a week.

## HONOUR COURSES

2b. *Hebrew and Ancient History*: The same as 2a, together with a more intensive study of selected topics. Three hours a week.

2c. *Oriental, Greek and Hebrew*: History of the Western Orient until 745 B.C. H. R. HALL, *The Ancient History of the Near East* (sixth edition). One hour a week.

3b. *Hebrew and Ancient History*: The same as 3a, together with a more intensive study of selected topics. Three hours a week.

3c. *Oriental, Greek and Hebrew*: History of the Western Orient from 745 B.C. to 330 B.C., with special attention to the history, literature and institutions of the Hebrews. One hour a week.

4b. *Hebrew and Ancient History*: The same as 4a, together with a study of exploration and archaeology of the lands of the Near East. Three hours a week.

4c. *Oriental, Greek and Hebrew*: History of the Western Orient from 330 B.C. to 135 A.D., with special attention to the history and literature of the Jews; the history of Mohammed and the Caliphate. One hour a week.

## ENGLISH

### UNIVERSITY COLLEGE:

W. J. ALEXANDER, PH.D., LL.D.....	<i>Professor Emeritus.</i>
D. R. KEYS, M.A.....	<i>Professor Emeritus.</i>
M. W. WALLACE, B.A., PH.D.....	<i>Professor.</i>
R. S. KNOX, M.A.....	<i>Associate Professor.</i>
H. J. DAVIS, M.A.....	<i>Associate Professor.</i>
W. H. CLAWSON, M.A., PH.D.....	<i>Associate Professor.</i>
J. F. MACDONALD, M.A.....	<i>Associate Professor.</i>
MISS G. E. WOOLEY, M.A.....	<i>Lecturer.</i>
MISS A. LOBB, M.A.....	<i>Lecturer.</i>
MRS. M. M. KIRKWOOD, M.A., PH.D.....	<i>Special Lecturer.</i>
MISS D. BLAKEY, M.A.....	<i>Fellow.</i>
W. S. MILNE, B.A.....	<i>Fellow.</i>

## VICTORIA COLLEGE:

O. P. EDGAR, B.A., Ph.D.	Professor.
C. E. AUGER, B.A.	Professor.
E. J. PRATT, M.A., Ph.D.	Associate Professor.
J. D. ROBINS, M.A.	Associate Professor.

## TRINITY COLLEGE:

H. C. SIMPSON, M.A.	Professor.
L. C. A. HODGINS, M.A.	Professor.
MISS M. CARTWRIGHT, B.A., LL.D.	Lecturer.

## ST. MICHAEL'S COLLEGE:

REV. E. J. MCCORKELL, M.A.	Professor.
M. MARGARITA, B.A.	Associate Professor of Anglo-Saxon.
M. PERPETUA, M.A.	Associate Professor.
M. DOROTHEA, M.A.	Lecturer.
M. ATHANASIA, M.A.	Lecturer.
REV. E. C. LE BEL, B.A.	Instructor.

Composition: In the first two years of the undergraduate course original essays are required during the session from students taking the Pass and Honour Courses in English, even from those who have received dispensation from attendance upon lectures. These essays, after being carefully examined, are returned with suggestions and criticisms, and the marks assigned are reckoned in determining standing in the May examinations.

Throughout the course Composition shall be regarded as a subject distinct from literature, and candidates failing to secure the necessary standing in these essays are required to repeat the work of the year in English Composition.

Provision will be made by a special paper in English Composition for the examination of those candidates for Senior Matriculation who are not in attendance, and who have not presented the essays required.

## PASS COURSES

1a. Composition: The writing of at least four original compositions during the session.

1b. Familiarity with and intelligent appreciation of the following texts: *Sir Patrick Spens*, Edward, *The Braes o' Yarrow, Waly Waly*; POPE, *Rape of the Lock*; THOMSON, extracts from *Summer and Winter*; GRAY, *Spring*, *Eton College*, *Elegy*; GOLDSMITH, *Deserted Village*; BURNS, *Address to the Deil*, *To John Lapraik*, *To a Mouse*, *Tam o' Shanter*, *Last May a Braw Wooer*, *A Man's a Man for a' that*; WORDSWORTH, *Sonnets*; SCOTT, *Rosalinde*, *Brigall Banks*, *Lochinvar*, *Old Mortality*; KEATS, *On Chapman's Homer*, *"Bright Star! would I"*, *The Eve of St. Agnes*, *On a Grecian Urn*, *To a Nightingale*, *To Autumn*; BROWNING, *Fra Lippo Lippi*, *The Bishop orders his Tomb*, *An Epistle*; RUSKIN, *The Crown of Wild Olive* (Preface, Work, Traffic); HUXLEY, *A Piece of Chalk*; ARNOLD, *The Study of Poetry*; BRYCE, *University Instruction*; HARDY, *The Return of the Native*; selections



from Canadian and recent British poetry. [The poetical selections in this paragraph are contained in *Representative Poetry* and *An Anthology of Modern Verse* (Methuen).] Two hours a week.

2a. Composition: The writing of at least four original compositions during the session.

2b. SHAKESPEARE, with special study of *Romeo and Juliet*, *Henry IV*, *Paris I and II*, *Hamlet*, *Antony and Cleopatra*, *The Tempest*. Two hours a week.

3a. The writing of essays on subjects connected with one of the Third Year courses in literature.

3b. (i) Eighteenth century literature with special study of the following texts: DEFOE, *Robinson Crusoe*; SWIFT, *Gulliver's Travels*; ADDISON, *Select Essays* (edited by J. R. Green, Macmillan); JOHNSON, *Preface to Shakespeare*, *Lives of Addison and Pope*; FIELDING, *Tom Jones*; GOLD-SMITH, *The Vicar of Wakefield*; BOSWELL, *Life of Johnson* (May 16, 1763-end of 1764; April 3, 1773-end of May, 1773; March 21, 1775-May 21, 1775); BURKE, *Reflections on the French Revolution*; TRACKERAY, *Esmond*; the selections from SWIFT, POPE, BURNS, BLAKE, CRABBE in *Representative Poetry*.

(ii) MILTON, selections in *Representative Poetry*, *Areopagitica*.

Three or two hours a week.

4a. The writing of essays on subjects connected with one of the Fourth Year courses in literature.

4b. Nineteenth century literature: selections from WORDSWORTH to MORRIS in *Representative Poetry*; selections from *An Anthology of Modern Verse* (Methuen); essays by WORDSWORTH, COLERIDGE and SHELLEY in *English Critical Essays of the Nineteenth Century* (World's Classics); LAMB, *Essays of Elia*; CARLYLE, *Sartor Resartus* (Books I and II); JANE AUSTEN, *Mansfield Park*; DICKENS, *David Copperfield*; ARNOLD, the essays on Keats, Byron and Shelley in *Essays in Criticism, Second Series*. Three or two hours a week.

#### HONOUR COURSES

1a. Composition: The writing of at least four original compositions during the session.

1c. CHAUCER, *Prologue*, *Nun's Priest's Tale*, *Squire's Tale*, with some outline of the history of the English language. One hour a week.

1d. Familiarity with and intelligent appreciation of the following texts: Sir Patrick Spens, Edward, The Braes o' Yarrow, Waly Waly; POPE, Rape of the Lock; GRAY, Spring, Eton College, Elegy; BURNS, Address to the Deil, To John Lapraik, To a Mouse, Tam o' Shanter, Last May a Braw Wooer; WORDSWORTH, Sonnets; SCOTT, Rosabelle, Brignall Banks, Loch-in-war, Old Mortality; KEATS, On Chapman's Homer, "Bright Star, would I", The Eve of St. Agnes, On a Grecian Urn, To a Nightingale, To Autumn;

CARLYLE, *Signs of the Times*; GEORGE ELIOT, *The Mill on the Floss*; BROWNING, *Fra Lippo Lippi*, *The Bishop orders his Tomb*, *An Epistle*; NEWMAN, *Knowledge its Own End*, *Knowledge in Relation to Learning*; HUXLEY, *A Piece of Chalk*, *Administrative Nihilism*; ARNOLD, *The Study of Poetry*; MORRIS, *The Lesser Arts*; BRYCE, *University Instruction*; HARDY, *The Return of the Native*; selections from Canadian and recent British poetry. [The poetical selections in this paragraph are contained in *Representative Poetry* and *An Anthology of Modern Verse* (Methuen).] Two hours a week.

2a. Composition: The writing of at least four original compositions during the session.

2b. SHAKESPEARE, with special study of *Romeo and Juliet*, *Henry IV*, *Parts I and II*, *Hamlet*, *Antony and Cleopatra*, *The Tempest*. Two hours a week.

2c. An outline of sixteenth century literature with special study of the following texts: MORE, *Utopia*; ASCHAM, *The Scholemaster*; SIDNEY, *Apology for Poetry*; HAKLUYT, *Voyages of Gilbert and Drake*; HOOKER, *Ecclesiastical Polity*, Book I; BACON, *Selected Essays*, *Advancement of Learning*, Book I; SPENSER, *Faerie Queene*, Book I; the selections from WYATT to DONNE in *Representative Poetry*. Two hours a week.

3a. The writing of essays on subjects connected with one of the Third Year courses in literature.

3b. MOORE and KNOTT, *The Elements of Old English*; selections from WYATT, *An Anglo-Saxon Reader*; outlines of Old English literature. Two hours a week.

3d. MILTON's poetry; the prose selections from MILTON contained in the volume in the *World's Classics*; the selections from JONSON to BUTLER in *Representative Poetry*; BROWNE, *Religio Medici*. Two hours a week.

3e. Eighteenth century poetry; eighteenth century prose with special study of DRYDEN, CONGREVE, DEFOE, SWIFT, ADDISON, JOHNSON, FIELDING, GOLDSMITH, BOSWELL, BURKE. Three or two hours a week.

3f. English essays. Two hours a week.

4a. The writing of essays on subjects connected with one of the Fourth Year courses in literature.

4b. Middle English literature: selections from COOK, *A Literary Middle English Reader*; CHAUCER, *House of Fame*. Historical English Grammar. Two hours a week.

4d. NEWMAN, *Apologia*, *The Idea of a University*, *Preface and Discourses V-VIII*; J. S. MILL, *Autobiography*, *Essays on Bentham*, *Coleridge*, *Civilisation*, *Liberty*; CARLYLE, *Past and Present* Book III, *Life of John Sterling*; RUSKIN, *Unto this Last*; ARNOLD, *Culture and Anarchy*, *Democracy*, *Equality*; HUXLEY, *Government: Anarchy or Regimentation*; MORLEY, *Compromise*. Two hours a week.

4e. The Development of the English Drama to 1642: reading of the following texts: *Noah's Flood, The Sacrifice of Isaac, Secunda Pastorum, Everyman* (Pollard's *Miracle Plays*); UDALL, *Ralph Roister Doister*; LYL, *Endymion*; GREENE, *Friar Bacon*; MARLOWE, *Tamburlaine, Part I, Doctor Faustus, Edward II*; KYD, *Spanish Tragedy*; SHAKESPEARE, with special reference to *Othello, King Lear, Antony and Cleopatra, Coriolanus, The Tempest*; BEN JONSON, *Every Man in his Humour*; BEAUMONT and FLETCHER, *Philaster*; WEBSTER, *Duchess of Malfi*. Two hours a week.

4f. English poetry of the nineteenth century; selections from *An Anthology of Modern Verse* (Methuen); essays by WORDSWORTH, COLERIDGE and SHELLEY in *English Critical Essays of the Nineteenth Century* (World's Classics); LAMB, *Essays of Elia*; CARLYLE, *Sartor Resartus* (Books I and II); JANE AUSTEN, *Mansfield Park*; DICKENS, *David Copperfield*; ARNOLD, the essays on *Keats, Byron and Shelley* in *Essays in Criticism, Second Series*. Three or two hours a week.

4g. English Bibliography. Two hours a week.

## GERMAN

### UNIVERSITY COLLEGE:

W. H. VANDER SMISSSEN, PH.D.....	<i>Professor Emeritus.</i>
G. H. NEEDLER, B.A., PH.D.....	<i>Professor.</i>
B. FAIRLEY, M.A., PH.D.....	<i>Professor.</i>
T. HEDMAN, PH.B.....	<i>Associate Professor.</i>
G. E. HOLT, M.A., MUS.BAC.....	<i>Assistant Professor.</i>

### VICTORIA COLLEGE:

A. E. LANG, M.A.....	<i>Professor.</i>
MISS M. E. T. ADDISON, B.A.....	<i>Lecturer.</i>
J. A. SURERUS, B.A.....	<i>Lecturer.</i>
MISS A. E. GRAYDON, B.A.....	<i>Fellow.</i>

### TRINITY COLLEGE:

A. H. YOUNG, M.A., D.C.L.....	<i>Professor.</i>
MISS L. C. SCOTT, M.A.....	<i>Associate Professor.</i>

### ST. MICHAEL'S COLLEGE:

REV. E. J. WELTY, M.A.....	<i>Associate Professor.</i>
----------------------------	-----------------------------

## PASS COURSES

1a. Grammar; dictation; pronunciation; translation from modern German; translation from English into German. Four hours a week.

1b. Reading of easy texts in scientific German. FIEDLER UND SANDBACH, *German Course For Science Students*. Supplementary reading. Two hours a week.

2a. Grammar; pronunciation; translation from modern German; translation from English into German. Three hours a week.

2b. Reading of texts in scientific German; translation of scientific German at sight. Two hours a week.

3a. Grammar; pronunciation; translation from English into German; translation at sight from modern German; outlines of the history of German literature to 1740; life and works of LESSING and SCHILLER, with special attention to LESSING, *Emilia Galotti*; SCHILLER, *Poems* (ed. Nollen), *Die Jungfrau von Orleans*. Supplementary reading. Three hours a week.

4a. Grammar; pronunciation; translation from English into German; translation at sight from modern German; outlines of the history of German literature from 1740; life and works of GOETHE, with special attention to *Poems* (ed. Schütze), *Faust*, Part I. Supplementary reading. Three hours a week.

#### HONOUR COURSES

1c. General introduction to modern German literature; *Oxford Book of German Verse* (pp. 70-374); SCHILLER, *Wilhelm Tell*; KELLER, *Romeo und Julia auf dem Dorfe*. Supplementary reading. Two hours a week.

1d. Oral term work; composition. Two hours a week.

1e. Political and social history of Germany to 1500. One half-hour a week.

1f. Composition; writing of business letters; practice in reading and writing German script; oral exercises. One hour a week.

1g. Reading of selected texts in German. Two hours a week.

1h. Phonetics. One hour a week.

2c. Life and works of LESSING and SCHILLER, with special reference to LESSING, *Laokoon* (Selections), *Emilia Galotti*, *Nathan der Weise*; SCHILLER, Selections from *Philosophische Schriften* (ed. Kühnemann), *Wallenstein*. Supplementary reading. Two hours a week.

2d. Oral term work; composition. One hour a week.

2e. Political and social history of Germany from 1500 to 1713. One half-hour a week.

2f. Reading of German texts; practice in business correspondence and conversation in German. Three hours a week.

3b. Life and works of GOETHE, with special attention to *Gedichte* (ed. von der Hellen), *Götz von Berlichingen*, *Wilhelm Meisters theatralische Sendung*, *Iphigenie auf Tauris*, *Faust* (Part I); ECKERMANN, *Gespräche mit Goethe* (Selections). Supplementary reading. Three hours a week.

3c. Oral term work; composition. One hour a week.

3d. Political and social history of Germany from 1713 to 1848. One hour a week.

3e. Essays on prescribed topics.

3f. Reading of German texts; practice in business correspondence and conversation in German. Three hours a week.

4b. The development of German literature of the nineteenth century, with special attention to GOETHE, *Faust* (Part II); HEINE, *Romanzero*, *Die romantische Schule*; KELLER, *Der grüne Heinrich* (Book I); NIETZSCHE, *Vom Nutzen und Nachteil der Historie für das Leben* (ed. Alfred Kröner, Leipzig); HAUPTMANN, *Festspiel*; *Das zweite Buch der Ernte der deutschen Lyrik* (ed. Vesper), *Vom deutschen Geist der Neuzeit* (ed. Schweizer). Supplementary reading. Two hours a week.

4c. Oral term work; composition. One hour a week.

4d. Middle High German grammar; history of the German language; history of Middle High German literature; WRIGHT, *Middle High German Primer*. One hour a week.

4e. Political and social history of Germany from 1848 to the present. One hour a week.

4f. Reading of German texts; practice in business correspondence and conversation in German. Three hours a week.

4g. Essays on prescribed topics.

## FRENCH

### UNIVERSITY COLLEGE:

JOHN SQUAIR, B.A.	Professor Emeritus.
J. H. CAMERON, M.A.	Professor (on leave of absence).
F. C. A. JEANNERET, B.A.	Professor.
J. S. WILL, B.A., PH.D.	Professor.
F. C. GREEN, M.A., PH.D., DOC. DE L'UNIV., O.A.	Professor.
ST. E. DE CHAMP, B. ÈS L., O.I.P.	Associate Professor.
L. ALLEN, M.A., PH.D.	Associate Professor.
H. S. MCKELLAR, B.A.	Assistant Professor.
J. G. ANDISON, A.M., PH.D.	Assistant Professor.
W. J. MCANDREW, M.A.	Assistant Professor.
MISS A. C. COLE, M.A.	Lecturer.
M. POIRIER, L. ÈS L.	Lecturer.
L. A. BIBET	Instructor.
A. E. TILBY	Instructor.
MISS J. C. LAING, B.A.	Instructor.
MISS C. M. LE PRÉVOST	Class Assistant.
MRS. W. R. PATTERSON	Assistant.

### VICTORIA COLLEGE:

H. E. FORD, M.A., PH.D.	Professor.
VICTOR DE BEAUMONT, A.M.	Professor.
MISS M. C. ROWELL, M.A.	Associate Professor.
A. LACEY, M.A., PH.D.	Associate Professor.
H. LASSERRE, B. ÈS L., B. ÈS SC., L. EN DR.	Lecturer.
REV. B. P. COLCLOUGH, B.A., B.TH.	Special Lecturer.

## TRINITY COLLEGE:

R. E. L. KITTREDGE, A.M.	Professor.
A. A. NORTON, B.A.	Lecturer.
MISS L. C. SCOTT, M.A.	Instructor.
L. A. BIBET	Reader.

## ST. MICHAEL'S COLLEGE:

REV. W. H. MURRAY, B.A., L. EN PH.	Professor.
M. AGNES, M.A.	Lecturer.
REV. E. L. RUSSELL, B.A.	Lecturer.
M. BERNARD, M.A.	Lecturer.
M. BERCHMANS, M.A.	Lecturer.

NOTE.—In order to be a member of any class in French, a student must satisfy the instructor as to his ability to profit by the instruction given. Supplementary reading under the direction of the staff may be required of students in all years.

## PASS COURSES

1a. Grammar; dictation; translation from English into French; translation at sight from modern French. Four hours a week.

1b. Study of texts and sight work of scientific nature. Two hours a week.

2a. Grammar; dictation; translation from English into French; translation at sight from modern French. Three hours a week.

2b. Study of texts and sight work of scientific nature. Two hours a week.

3a. Standards of the classical age and the main ideas of the XVIIth century, studied in French literature from Malherbe to André Chénier. MORNET, *Histoire de la littérature et de la pensée françaises*; CORNEILLE, *Le Cid*; MOLIÈRE, *Le Misanthrope*; RACINE, *Andromaque*; two additional plays of the XVIIth century (a tragedy and a comedy); LA FONTAINE, *Fables*; and representative selections from the works of DESCARTES, PASCAL, LA ROCHEFOUCAULD, BOSSUET, LA BRUYÈRE, MONTESQUIEU, VOLTAIRE, J. J. ROUSSEAU.

Supplementary reading from the authors of the period, carried on under the direct supervision of the instructors, forms an essential part of this course.

Composition; translation at sight from modern French. Three hours a week.

4a. Forces and movements in French literature since 1750. MORNET, *Histoire de la littérature et de la pensée françaises*; SCHINZ, *Vie et œuvres de J. J. Rousseau*; BALZAC, *Le curé de Tours*; ROSTAND, *Cyrano de Bergerac*; BOURGET, *Laurence Alban*; ESTAUNIÉT, *L'infirme aux mains de lumière*; HEMON, *Maria Chapdelaine*; French Lyrics of the XIXth century (ed. Henning).

Supplementary reading from the authors of the period, carried on under the direct supervision of the instructors, forms an essential part of this course.

Composition; translation at sight from modern French. Three hours a week.

#### COURSES FOR STUDENTS IN COMMERCE AND FINANCE

1c. Study of modern French texts; translation at sight. Two hours a week.

1d. Exercises in French grammar and composition. One hour a week.

1e. Practical work in oral French. One hour a week.

2c. Study of modern French texts; translation at sight. Two hours a week.

2d. Exercises in French grammar and composition. One hour a week.

2e. Practical work in oral French. One hour a week.

3b. Practical exercises in French conversation and commercial correspondence. Study of the following texts: FISH, *French Commercial Correspondence*; *La France qui travaille* (ed. Jago); POOLE and BECKER, *Commercial French*. Two hours a week.

4b. Practical exercises in French Conversation, and Commercial Correspondence. Study of the following texts: RENAULT, *Du Commerce*; FISH, *French Commercial Correspondence*; P. CLERGET, *Manuel d'Économie commerciale*. Two hours a week.

#### HONOUR COURSES

In determining the standing of all candidates in Honour French, examiners will take into account the reports of the instructors in this subject.

Students taking the full Honour French course must make satisfactory progress in the oral use of the language. Opportunity for this work will be provided in each of the four years.

1f. Survey of French literature up to 1550. In addition, the following texts are prescribed: BRIEUX, *La robe rouge*; BALZAC, *Eugénie Grandet*; *Contes Français* (ed. Buffum); *Fabliaux et contes* (ed. Tarsat); *French Lyrics* (ed. Canfield). Grammar, dictation, pronunciation, translation. Four hours a week.

1g. French Phonetics.

1h. Outlines of Mediæval History.

2f. History of French literature from the middle of the sixteenth century to the end of the seventeenth century, illustrated by the reading of texts from which the following are prescribed for critical study: *French Verse of*

*the XVIIth Century* (ed. Wright); BOSSUET, *Oraison funèbre de Henriette d'Angleterre*; LA BRUYÈRE, *Caractères (De la Société)*; CORNEILLE, *Le Cid*; RACINE, *Andromaque, Bérénice*; MOLIÈRE, *L'Avare, Le Misanthrope*; BOILEAU, *L'Art poétique*; LA FONTAINE, *Fables* (ed. Clément). Two hours a week.

2g. History of France in the sixteenth and seventeenth centuries.

2h. Simple narrative composition; translation from English into French; translation at sight. One hour a week.

3c. French history, civilization and literature from Louis XIV to the Restoration. Extensive readings in French authors from Fénelon to Chateaubriand, under the direct supervision of the instructors, with close study of representative works.

3d. Elementary course in old French.

3e. Composition; translation from English into French; translation at sight.

3f. Essays on prescribed topics.

4c (1) History of French literature from 1815 to the present day, and acquaintance with representative works of this period. The following authors are prescribed for special study: Modern lyric poetry—LAMARTINE, VICTOR HUGO, LECONTE DE LISLE, VERLAINE; The modern novel—BALZAC, FLAUBERT, ANATOLE FRANCE, BOURGET; The modern drama—BECQUE, HERVIEU, HUGO, ROSTAND. (2) Readings from French-Canadian literature.

4d. History of France from the beginning of the nineteenth century to the present.

4e. Composition; translation from English into French; translation at sight from French authors of any period.

4f. Elementary course in Old French.

4g. Essays on prescribed topics.

## ITALIAN AND SPANISH

M. A. BUCHANAN, B.A., PH.D.	Professor.
J. E. SHAW, A.B., PH.D.	Professor.
E. GOGGIO, M.A., PH.D.	Associate Professor.
G. C. PATTERSON, B.A.	Assistant Professor.
J. CANO, A.M.	Assistant Professor.
H. W. HILBORN, M.A.	Lecturer.
MISS M. SQUAIR, M.A.	Substitute.

## ITALIAN

1a. For Pass and Honours. Grammar; pronunciation and dictation; translation; oral exercises. Text-books: WILKINS AND SANTELLI, *Beginners' Italian Reader*; GOGGIO, *Due commedie moderne*. Four hours a week.



1b. For Honours. Italian Phonetics. One hour a week.

1c. For students who have matriculated in Italian. The same as 2a.

2a. For Pass and Honours. Review of the grammar, exercises in writing, pronunciation and translation. Text-books: GRANDGENT, *Italian Grammar*; *Il risorgimento* (Van Horne); GIACOSA, *Come le foglie*; FOGAZZARO, *Idilli spezzati*. Three hours a week.

2b. For students who have matriculated in Italian. The same as 3a.

3a. For Pass and Honours. Literature and history of the 19th century. Text-books: VERGA, *I Malavoglia*; *Antologia Carducciana* (Mazzoni e Picciola); (for Pass) COLLISON MORLEY, *Modern Italian Literature*; (for Honours) ROSSI, *Storia della letteratura italiana*, vol. III; CROCE, *La letteratura della nuova Italia*, vol. III; BICKERSTETH, *Carducci*. Composition and conversation. Three hours a week.

3b. For Honours. Literature and history of the 16th century. Text-books: CELLINI, *Vita* (Padovan); MACHIAVELLI, *Il principe* (Lisio); ROSSI, *Storia della letteratura italiana*, vol. II; SYMONDS, *A Short History of the Renaissance*; COTTERILL, *Italy from Dante to Tasso*, Part III. Lectures in Italian on the art, history, and literature of Italy. Two hours a week.

3c. For Honours. Essays on prescribed topics.

3d. For students in Commerce and Finance. Reading of prescribed texts; composition, pronunciation and oral practice; commercial correspondence. Text-books: HECKER, *Il piccolo Italiano*; ORSI, *Italia moderna*. Three hours a week.

3e. For students who have matriculated in Italian. For Pass, the same as 4a; for Honours, the same as 4a, 4b.

4a. For Pass and Honours. Literature and history of the 13th and 14th centuries. Text-books: DANTE, *Divina commedia* (Grandgent); (for Pass) COTTERILL, *Mediaeval Italy*, Part V; (for Honours) ROSSI, *Storia della letteratura italiana*, Vol. I; DANTE, *Vita nuova* (McKenzie); GRANDGENT, *Dante*. Composition, pronunciation and conversation. Three hours a week.

4b. For Honours. PETRARCA, *Rime* (Carducci e Ferrari); DE SANCTIS, *Saggio critico sul Petrarca*. Lectures in Italian on the art, history and literature of Italy. Two hours a week.

4c. For Honours. Essays on prescribed topics.

4d. For students in Commerce and Finance. Reading of prescribed texts; composition and oral practice; commercial correspondence. Text-books: PITMAN, *Mercantile Correspondence*; RICCI, *Commercial Italian Grammar*. Lectures on the history, geography and economic development of Italy. Three hours a week.

4e. For students who have matriculated in Italian. For Pass, reading of prescribed texts. Three hours a week. For Honours, study of a period of the literature; lectures in Italian; composition and conversation. Five hours a week.

## SPANISH

1a. Grammar; pronunciation and dictation; translation; oral exercises. Text-books: CRAWFORD, *First Book in Spanish*; HILLS, *Spanish Tales for Beginners* (for Honours); CANO, *Cuentos humorísticos* (ed. Goggio) (for Pass). Four hours a week.

1b. Spanish Phonetics. One hour a week.

1c. Elementary Spanish for students in the Faculty of Applied Science. PASSARELLI, *Simple Spanish Book*.

1d. For students who have matriculated in Spanish. The same as 2a.

2a. Grammar; pronunciation and dictation; translation; composition; oral exercises. Text-books: BLASCO IBÁÑEZ, *Siete cuentos*; ROMERA-NAVARRO, *Historia de España*; SEYMOUR AND CARNAHAN, *Short Spanish Review Grammar*; CRAWFORD, *Temas españoles*. Three hours a week.

2b. For students who have matriculated in Spanish. For Pass, the same as 3a; for Honours, VALERA, *Pepita Jiménez*; BLASCO IBÁÑEZ, *La Barraca* (ed. Keniston); WILKINS, *New Second Spanish Book*. Composition in Spanish, pronunciation and oral exercises; lectures in Spanish. Supplementary reading: AZORÍN, *España*. Three hours a week.

3a. History of Spanish literature in the nineteenth century. Text-books: MORATÍN, *El sí de las niñas* (ed. Ford); PÉREZ GALDÓS, *La loca de la casa* (ed. Warshaw); BENAVENTE, *Los intereses creados* (ed. Van Horne); VALERA, *Pepita Jiménez*; BLASCO IBÁÑEZ, *La Barraca*; NORTUP, *An Introduction to Spanish Literature*. Three hours a week.

3b. Composition in Spanish, pronunciation and oral exercises; lectures in Spanish on the art, history and literature of Spain and Spanish America. Text-books: AZORÍN, *España*; WILKINS, *New Second Spanish Book*. Two hours a week.

3c. Essays on prescribed topics.

3d. For students who have matriculated in Spanish. For Honours, the same as 4a, 4b; for Pass, the same as 4a.

3e. For students in Commerce and Finance. Text-books: MCHALE, *Commercial Spanish*; WILKINS, *New Second Spanish Book*. Composition in Spanish, pronunciation and oral exercises; lectures in Spanish. Supplementary reading: MCHALE, *Un Viaje a Sud América*. Three hours a week.

3f. For students in Commerce and Finance who have matriculated in Spanish. The same as 4e.

4a. History of Spanish literature: the Golden Age. Text-books: CERVANTES, *Don Quijote*; *La novela picaresca* (ed. Ruiz Morcuende); *La Estrella de Sevilla* (ed. Thomas); RUIZ DE ALARCÓN, *La Verdad sospechosa* (ed. Elder); *Poetas de los siglos XVI y XVII* (ed. Blanco Suárez); NORTUP, *An introduction to Spanish Literature*. Three hours a week.

4b. Composition, pronunciation and oral exercises; lectures in Spanish on the art, history and literature of Spain and Spanish America. Text-books: UNAMUNO, *Ensayos*, Vol. III; CASTILLO AND MONTGOMERY, *Advanced Spanish Composition*. Two hours a week.

4c. Essays on prescribed topics.

4d. For students who have matriculated in Spanish. Reading of prescribed texts; composition, pronunciation and oral practice; essays. Three hours a week for Pass; five hours a week for Honours.

4e. For students in Commerce and Finance. Composition; pronunciation; oral practice, based on mercantile topics; commercial correspondence. Text-books: M. ROMERA-NAVARRO, *Manual del Comercio*; CASTILLO AND MONTGOMERY, *Advanced Spanish Composition*. Supplementary reading: FUENTES AND ELÍAS, *Manual de Correspondencia*. Three hours a week.

4f. For students in Commerce and Finance who have matriculated in Spanish. Reading of prescribed texts; composition, pronunciation and oral practice; essays. Three hours a week.

#### PHONETICS

Elementary physiological phonetics, with practical exercises in the sounds of the modern languages studied. One hour a week.

#### HISTORY

G. M. WRONG, M.A., LL.D.....	<i>Professor.</i>
G. M. SMITH, M.A.....	<i>Associate Professor.</i>
R. FLENLEY, M.A., B.LITT.....	<i>Associate Professor.</i>
H. H. WRONG, B.A., B.LITT.....	<i>Assistant Professor.</i>
L. B. PEARSON, M.A.....	<i>Lecturer.</i>
G. P. DE T. GLAZEBROOK, B.A.....	<i>Lecturer.</i>
G. W. BROWN, M.A., PH.D.....	<i>Lecturer.</i>
J. C. P. PROBY, M.A., B.LITT.....	<i>Lecturer.</i>

No text-books are prescribed in History. Some of the more important books are listed after the description of each course, for the guidance of students.

Essays are required in all courses.

#### PASS COURSES

2a. The History of Canada: from the age of discovery to the present day. For the main subjects of study and list of books, see course 1a.

2b. The History of the United States: from the Colonial Period to the present day. For the main subjects of study and list of books, see course 1b.

3a. The History of Europe, 1763-1815. For the main subjects of study and list of books, see course 3c.

3b. British History, 1689-1815. For the main subjects of study and list of books, see course 3d.

4a. The History of Europe, 1815-1914. For the main subjects of study and list of books, see course 4d.

4b. British History, 1815-1914. For the main subjects of study and list of books, see course 4e.

4c. The Political Institutions of the Modern British Empire: the governments of Great Britain, Ireland, Canada and the other Dominions, India and the Crown Colonies; the chief constitutional problems of the British Commonwealth.

Books: KEITH, *The Constitution, Administration, and Laws of the Empire*; DICEY, *Law of the Constitution*; ANSON, *Law and Custom of the Constitution*; LOWELL, *Government of England*; KEITH, *Dominion Home Rule*; SWIFT MCNEILL, *Constitution of the Irish Free State*; ILBERT AND MESTON, *The New Constitution of India*.

#### HONOUR COURSES

1a. The History of Canada: the age of discovery; the French explorers and the fur trade; society and government in New France; the struggle for supremacy of France and Britain; early British rule in Canada; the Loyalist migration and the English-speaking settlements; rebellion leading to political union; the federation of Canada; the expansion to the Pacific; growth towards nationhood.

Books: FISKE, *The Discovery of America*, 2 volumes; the works of FRANCIS PARKMAN; MUNRO, *The Crusaders of New France*; WRONG, *The Conquest of New France* (Chronicles of America), *The Fall of Canada*; SKELTON, *The Canadian Dominion* (Chronicles of America); EGERTON Canada, 1763-1921; LORD DURHAM's Report (ed. Lucas); KENNEDY, *The Constitution of Canada, Documents of the Canadian Constitution*; BURPEE, *Historical Atlas of Canada*; and biographical study from the series, "The Chronicles of Canada", or "The Makers of Canada", especially Dorchester, Sydenham, Macdonald and Laurier.

1b. The History of the United States: the colonial period; the American Revolution; the framing of the federal constitution; territorial expansion; the Civil War; the United States as a great power.

Books: ADAMS, *Founding of New England, Revolutionary New England*; FORMAN, *History of the American People*; HARLOW, *Growth of the United States*; LECY, *The American Revolution*; EGERTON, *The American Revolution*; FISKE, *The American Revolution*, 2 volumes; VAN TYNE, *Loyalists in the American Revolution*; WRONG, *Washington and his Comrades in Arms* (Chronicles of America); OLIVER, *Alexander Hamilton*; CHARNWOOD, *Abraham Lincoln*; WOOD, *Captains in the Civil War* (Chronicles of America); RHODES, *History of the Civil War, 1861-1865*; PAXSON, *Recent History of the United States*. For students reading more extensively the following are recommended: *The Cambridge Modern History*, Vol. VII; CHANNING,

*History of the United States*; SIR G. TREVELYAN's volumes on *The American Revolution*; and for the causes and effects of the Civil War, J. F. RHODES, *History of the United States, 1850-1898*.

2c. Mediaeval Europe: beginning with the Roman Empire of the 4th century and closing with the development of the monarchies of France and England in the 12th and 13th centuries.

Books: for outlines, ORTON, *Outlines of Mediaeval History*; THORNDIKE, *Mediaeval Europe*; BRYCE, *Holy Roman Empire*; *The Cambridge Mediaeval History*; BURY, *Later Roman Empire*; HODGKIN, *Italy and her Invaders*; BARNARD, *Mediaeval England* (ed. Davis); COULTON, *A Mediaeval Garner, Five Centuries of Religion*; MUNRO and SELLERY, *Mediaeval Civilisation*.

2d. A short introductory course on the later Middle Ages followed by the Renaissance and the Reformation: from the invasion of Italy by Charles VIII to the Treaty of Westphalia; political aspects of the Renaissance in Italy—Milan, Venice, Florence, the Papal States, Naples; the art of the Renaissance; the Reformation in Germany; the Hapsburg dominions and the empire of Charles V; the rise and decline of the Spanish power; centralization and absolutism in France; the Hapsburg-Valois feud; the Counter-Reformation; the revolt of the Spanish Netherlands; the wars of religion in France; Sweden under the Vasa; the Thirty Years' War; France under Henry IV and Louis XIII; the rise and decline of the Turkish power; political theory from Machiavelli to Grotius.

Books: for the introductory course, DAVIS, *Mediaeval Europe*; DAVIES, *Mediaeval England, 1066-1500*; LODGE, *Close of the Middle Ages*. For the period 1494-1648, JOHNSON, *Europe in the 16th Century*; WAKEMAN, *The Ascendancy of France*; SYMONDS, *The Renaissance in Italy*, Vol. I; ACTON, *Lectures in Modern History*; OGG, *Europe in the Seventeenth Century*; CREIGHTON, *History of the Papacy*; PRESERVED SMITH, *The Age of the Reformation*; LINDSAY, *The Reformation*; BATIFFOL, *The Century of the Renaissance in France*; ARMSTRONG, *Charles V*. For reference, the *Cambridge Modern History*.

2e. British History, 1485-1688. The Tudor system of government; the agrarian revolution of the 16th century; the English Reformation; exploration and colonization; foreign relations; Puritan Revolution; Stuart theory and practice; the Restoration; the Revolution of 1688; Ireland under the Tudors and Stuarts; political theories of the period.

Books: TREVELYAN, *History of England*; RAMSAY MUIR, *Short History of the British Commonwealth*, Vol. I; *Political History of England*, ed. Hunt and Poole, Vol. V (Fisher) and Vol. VI (Pollard); POLLARD, *Henry VIII, Factors in Modern History*; CREIGHTON, *Elizabeth*; CONYERS READ, *Mr. Secretary Walsingham*; TREVELYAN, *England under the Stuarts*; SEELEY, *Growth of British Policy*; FIRTH, *Cromwell*; MORLEY, *Cromwell*; FELLING, *Tory Party*.

2f. The Constitutional History of England to 1603; to be studied with original documents. Anglo-Saxon institutions; organization of Norman

England; feudalism; administrative and judicial centralization under the Angevins; evolution of Parliament; the Lancastrian experiment; the Tudor monarchy; development of local government; Church and State in the middle ages; the Tudor religious settlement.

Books: ADAMS AND STEPHENS, *Select Documents of English Constitutional History*; STUBBS, *Select Charters*; TANNER, *Tudor Constitutional Documents*; ADAMS, *Constitutional History, The Origin of the English Constitution*; MAITLAND, *Constitutional History*; WHITE, *The Making of the English Constitution*; McKECHNIE, *Magna Charta*; POLLARD, *Evolution of Parliament*; McILWAIN, *High Court of Parliament*; BALDWIN, *King's Council*; PROTHERO, *Introduction to Statutes and Constitutional Documents*.

2g. A general survey of English constitutional history from the earliest times to the present. For the main subjects of study and list of books, see Courses 2f and 3e.

2h. Selected texts in Modern History: a course of study based on selections from the works of leading French or German historians as a preparation for the independent study of History in one of these languages.

Texts for 1927-8: either SOREL, *L'Europe et la Révolution française*, Vol. I or FUETER, *Geschichte des Europäischen Staatensystems, von 1492-1559*.

3e. Europe, 1763-1815. Political and social conditions in Europe, and especially in France, before 1789; the French philosophers; the failure of enlightened despotism. The beginning of the Revolution in France; the appeal to force; the reforms of the Constituent Assembly; the outbreak of war, the second revolution, and the fall of the throne; the Convention, the Jacobin government, and the Reign of Terror. The failure of the middle-class reaction 1794-99. The advent of Napoleon; the reorganization of France under the Consulate; the path to Empire and the conquest of Europe; Napoleonic statesmanship in Germany and Italy; the Continental System; the war of Liberation and the fall of Napoleon.

Books: LECKY, *England in the Eighteenth Century* (chapters on France); TOCQUEVILLE, *France before the Revolution*; TAINÉ, *Ancient Régime*; YOUNG, *Travels in France*; SOREL, *L'Europe et la Révolution Française*, vol. i; ACTON, *Lectures on the French Revolution*; MADELIN, *French Revolution*; AULARD, *French Revolution*; BARTHOU or WILLERT, *Mirabeau*; MADELIN, *Danton*; BELLOC, *Robespierre*; or MORLEY, *Robespierre* (in *Critical Miscellanies*); VANDAL, *L'Avènement de Bonaparte*; lives of Napoleon by FOURNIER, ROSE and FISHER; FISHER, *Bonapartism*; *Napoleonic Statesmanship in Germany*; *Cambridge Modern History*, Vols. VIII and IX.

3d. British History, 1689-1815. The relations of England, Scotland and Ireland; the evolution of Cabinet government and of the Whig and Tory parties, with special reference to the work of Walpole, Chatham and the younger Pitt; British foreign and colonial policy; the struggle with France, especially in the field of colonial enterprise; the loss of the

American Colonies; society before and during the Industrial Revolution; the Methodist movement; the effects of the French Revolution on English life and thought.

Books: MUIR, *Short History of the British Commonwealth*; FLETCHER, *Introductory History of England*, Vol. iii; TREVELYAN, *History of England*; ROBERTSON, *England under the Hanoverians*; MACAULAY, *History of England, Essays*; LECKY, *England in the Eighteenth Century*; MORLEY *Walpole*; BURKE; WILLIAMS, *Chatham*; HOLLAND ROSE, *Pitt*; ROSEBERRY, *Pitt*; TREVELYAN, *Early Life of C. J. Fox*; COUPLAND, *Wilberforce*.

3e. The Constitutional History of England since 1603: a course based on the following books of documents: PROTHERO, *Constitutional Documents, 1558-1625*; GARDINER, *Documents of the Puritan Revolution, 1625-1660*; GRANT ROBERTSON, *Select Cases, Statutes, Documents, 1660-1832*. The development of the modern Constitution; the struggle for the "rule of law" and the sovereignty of Parliament in the 17th century, with the constitutional experiments of the Cromwellian interregnum; the unions with Scotland and Ireland; the rise of parties and the cabinet system; reform in central and local government in the 19th century; the advent of political democracy; the working of modern British institutions.

Books: the Constitutional Histories of MAITLAND and ADAMS; MCILWAIN, *High Court of Parliament*; POLLARD, *Evolution of Parliament*; DICEY, *Law of the Constitution*; LOWELL, *Government of England*. For reference: HOLDSWORTH, *History of English Law*; articles in the *English Historical Review*; ERSKINE MAY, *Constitutional History*; ANSON, *Law and Custom of the Constitution*; REDLICH AND HIRST, *Local Government in England*.

3f. Political Theory (Ancient): a course based on Aristotle's *Politics*, Plato's *Republic*, and Maine's *Ancient Law*. The *Politics* will be used as a basis for discussion of the following topics: the Greek city state; the nature and end of the state; political rights; the sphere of law; the state and property; the state and education; the Greek conception of democracy.

3g. A special subject studied with reference to original authorities. A list of subjects is printed below.

4d. The History of Europe, 1815-1914: a study of the national movements of the 19th century and their effect upon international relations. Special attention will be paid to: the settlement of Vienna and the Congress period; the revolutions of 1848; the age of Napoleon III and the foundation of the Third French Republic; the work of Cavour in Italy and of Bismarck in Germany; the growth of German imperialism and the resultant diplomatic changes, the Near Eastern and Balkan problems; the causes of the Great War.

Books: LIPSON, *Europe in the Nineteenth Century*; A. PHILLIPS, *Modern Europe*; SEIGNOBOS, *Political History of Contemporary Europe*; FUETER, *World History, 1815-1920*; FRYER, *History of Modern Europe*; GOOCH,

*Modern Europe, 1878-1919; Cambridge Modern History, Vols. X-XII.* For France, BOURGEOIS, *Modern France*; GUEDELLA, *The Second Empire*; SIMPSON, *The Rise of Louis Napoleon, Louis Napoleon and the Recovery of France*; LOWES DICKINSON, *Revolution and Reaction in Modern France*; for Italy, STILLMAN, *Union of Italy*; BOLTON KING, *Mazzini*; ORSI, *Cavour*; for Germany, ROBERTSON, *Bismarck*; DAWSON, *The German Empire*; GOOCH, *Germany*; for Austria-Hungary, WICKHAM-STEED, *The Hapsburg Monarchy*.

4e. The History of Great Britain, 1815-1914. The Industrial Revolution and the social history of industrialized England; reform in central and local government; the Benthamite philosophy; Free Trade; the Manchester School; Liberalism; the working class movements, e.g., Chartism, and Trade Unionism; the advent of democracy and its influence on policy and institutions; the history of political parties; the development of British "Imperial" opinion; the Irish question; domestic politics under Gladstone, Disraeli, Salisbury; foreign policy from Castlereagh to Sir Edward Grey.

Books: TREVELYAN, *British History in the Nineteenth Century*; MUIR, *Short History of the British Commonwealth*, Vol. II; EGERTON, *History of British Foreign Policy*; *Cambridge History of British Foreign Policy*; DICEY, *Law and Opinion in England*. Biographies: TEMPERLEY, *Canning*; WALLAS, *Francis Place*; COLE, *Cobbett*; TREVELYAN, *Grey of the Reform Bill*, *Bright*; MONYPENNY AND BUCKLE, *Disraeli*; MORLEY, *Gladstone*; STRACHEY, *Queen Victoria*; GREY OF FALLODON, *Twenty-five Years*; OXFORD AND ASQUITH, *Fifty Years of the British Parliament*.

4f. The Constitutional History of Canada from 1759 to the present day; the period of military government and constitutional investigation; the Quebec Act; the new factor—the English-speaking settlers; the Constitutional Act; the struggle for self-government; rebellion, Durham, the Act of Union; parliamentary government; federation; the interpretation and working of the British North America Act; recent developments.

Books: KENNEDY, *Constitution of Canada*, and *Documents of Canadian Constitution*; SHORT AND DOUGHTY, *Canadian Constitutional Documents*; DOUGHTY AND MCARTHUR, *Canadian Constitutional Documents*; KEITH, *War Government in the Dominions*; LEFROY, *Canadian Constitutional Law*.

4g. The Political Institutions of the modern British Empire: an advanced course on the subjects outlined in 4c, p. 107. Additional books: EGERTON, *Federations and Unions*; HALL, *The British Commonwealth of Nations*; CHIROL, *India*; *Report on Indian Constitutional Reforms, 1918*; LUGARD, *The Dual Mandate in British Tropical Africa*; WRONG, *The Government of the West Indies*.

4h. A Special Subject (continued from the Third Year).



SPECIAL SUBJECTS

See 3g and 4h. The following subjects, of which one shall be chosen, are offered for 1927-8:

(1) The American Revolution. A course based on the following original authorities: MORISON, *The American Revolution, Sources and Documents*; TYLER, *Literary History of the American Revolution* (2 vols.); WRAXALL, *Historical Memoirs of our own Times*; RAYMOND (Editor), *The Winslow Papers*; CURWEN, *Journals and Letters 1775-1784*; BURKE, *Speeches on America*; FRANKLIN, *Writings*; DONNE, *Correspondence of George III with Lord North, 1768-1783* (2 vols.).

(2) The Canadian West from 1670: a course based on the narratives of explorers and travellers and on documents of the British and Canadian governments.

(3) Representative Government. The working of representative government in Great Britain, Canada, the United States, France, and Switzerland; the theory of representative government; special problems of modern democracy, such as electoral systems, direct government, the influence of political parties, parliamentary procedure, and the form of second chambers. The course will be based on the study of constitutional documents and parliamentary papers.

(4) International Relations since 1919. The treaties of peace; the attempt to carry out the settlement of Versailles; the League of Nations in operation; the Ruhr; the International Conferences; the question of disarmament; the Dawes Report; the Locarno Pact; the influence of Russia and of the United States on international affairs; problems of the Near and Middle East; the mandated territories.

The course will be based on official documents such as those contained in *A History of the Peace Conference of Paris* (ed. Temperley, 6 vols.), recent monographs and periodical literature, and the publications of the League of Nations Society and of the Royal Institute of International Affairs.

POLITICAL ECONOMY

R. M. MACIVER, M.A., D.PHIL.....	Professor.
C. R. FAY, M.A., D.SC.....	Professor of Economic History.
W. T. JACKMAN, M.A.....	Professor of Rural Economics.
G. E. JACKSON, B.A.....	Associate Professor.
H. A. INNIS, M.A., PH.D.....	Assistant Professor.
H. R. KEMP, M.A.....	Assistant Professor.
V. W. BLADEN, M.A.....	Lecturer.
A. BRADY, M.A., PH.D.....	Lecturer.
J. L. MCDUGALL, M.A.....	Lecturer.
A. J. GLAZEBROOK.....	Special Lecturer in Banking and Finance.
E. J. URWICK, M.A.....	Special Lecturer.

1a. Economic Geography. The course deals with the more important commodities of the world's trade. Among the books which will be found useful in whole or in part are the following: NEWBIGIN, *Commercial Geography*; SMITH, *Industrial and Commercial Geography*; DAY, *History of Commerce*; FINCH AND BAKER, *Geography of the World's Agriculture*; MILLER, *Some Great Commodities*; PHILLIPS, *Chamber of Commerce Atlas*; United States Department of Agriculture Year-book; *International Year-book of Agricultural Statistics*; *Canada Year-book*, and publications of the Dominion Bureau of Statistics; also publications of the Natural Resources Intelligence Service, and other Government departments.

1b. Social Science. Historical outline of the extension of man's power over nature, and the development of social forms. References: MARETT, *Anthropology*; MUELLER-LYER, *History of Social Development*; GOLDENWEISER, *Ancient Civilization*; MARVIN, *The Living Past*; MACIVER, *Community*. Two hours a week.

2a. Principles of Economics. The course will be based on: MARSHALL, *Principles of Economics*; CASSEL, *Theory of Social Economy*. The following books will also be found useful: WICKSTEED, *Common Sense of Political Economy*; CASSEL, *Nature and Necessity of Interest*; SMART, *Distribution of Income*; CARVER, *Distribution of Wealth*; WRIGHT, *Population*; LAYTON, *Introduction to the Study of Prices*. Three hours a week.

2b. Economic History. British Economic History from the middle ages to the present day, with special reference to the period from 1700 onwards; books recommended: ASHLEY, *Economic Organization of England*; REES, *Fiscal and Financial History of England, 1815-1918*; KNOWLES, *Industrial and Commercial Revolutions in Great Britain during the 19th Century*; FAY, *Life and Labour in the 19th Century*; BUXTON, *Finance and Politics*; PROTHERO, *English Farming Past and Present*; JACKMAN, *Transportation in Modern England*; ANDREADES, *History of the Bank of England*; DICRY, *Law and Opinion in England*; WEBB, *History of Trade Unionism*; BLAND, BROWN and TAWNEY, *English Economic History, Select Documents*; ADAM SMITH, *Wealth of Nations* (Book IV). Three hours a week.

2c. Structure of Modern Industry. A description of the important characteristics of modern industry, as a basis for understanding the pure theory of economics and discovering some of its limitations. Books recommended: MARSHALL, *Industry and Trade*; CLARK, *Economics of Overhead Costs*; THORP, *Integration of Industrial Operation*; TAYLOR, *Scientific Management*; *Report of the Committee on Trusts* (1919); LEVY, *Monopoly and Competition*; *Canada Year Book*, etc. Three hours a week.

2d. The Industrial Revolution. This course deals with the growth of machine industry. Books recommended: KNOWLES, *Industrial and Commercial Revolutions in Great Britain during the Nineteenth Century*; and other works dealing with the more important trends in modern industry. One hour a week.

2e. General Introduction to the Study of Economics. For pass students. Elements of Economic Theory, sketch of Economic History, and of important social changes and movements. Books recommended: TAUSSIG, *Principles of Political Economy*; CARVER, *The Distribution of Wealth*; ROBERTSON, *Control of Industry*; WITHERS, *Meaning of Money*. Two hours a week.

3a. Labour Problems. A study of problems and experiments, relating to industrial disputes and their settlement, co-operation, profit-sharing, unemployment and its remedies, wage boards and the minimum wage, immigration and population problems with reference to Canada, trade-unionism and general labour organization, labour legislation. Books recommended: WATKINS, *Introduction to the Study of Labour Problems*; WEBB, *Industrial Democracy*; HOBSON, *Economics of Unemployment*; FAY, *Co-Partnership in Industry*; *The Labour Gazette* (Canada); Publications of the International Labour Office; *Survey of Industrial Relations* (Committee on Industry and Trade, England, 1926); BURNS, *Wages and the State*. One hour a week.

3b. Money, Credit and Prices. A course dealing with international trade and monetary theory; the gold standard; Canadian finance in war-time; banking systems; the business cycle; the problem of reparations. Books recommended: FOSTER AND CATCHINGS, *Money*; FISHER, *The Purchasing Power of Money*; HAWTREY, *Currency and Credit*; MARSHALL, *Money, Credit and Commerce*; VINER, *Canada's Balance of International Indebtedness*; DE LAUNAY, *The World's Gold*; LEHFELDT, *Gold and the Wheatstraw*; WITHERS, *The English Banking System*; PALGRAVE, *Bank Rate and the Money Market*; WILLIS, *The Federal Reserve System*; JOHNSON, *The Canadian Banking System*; MITCHELL, *Business Cycles*; LAVINGTON, *The Trade Cycle*; MOORE, *Generating Economic Cycles*; *Business Cycles and Unemployment*; KEYNES, *Economic Consequences of the Peace*; MOULTON AND MAGUIRE, *Germany's Capacity to Pay*; *Report of the Dawes Commission*; CASSEL, *Money and Foreign Exchange after 1914*; KEYNES, *Monetary Reform*; LLOYD, *Stabilisation*. Three hours a week.

3c. Statistics. General introduction to the use of statistics; methods of collection, tabulation, graphic presentation, analysis and interpretation, and application to the study of business cycles, population, and other economic problems. Survey of some of the principal sources of statistical information. A considerable part of the course will be devoted to laboratory work. Books recommended: MILLS, *Statistical Methods*; CRUM AND PATTON, *Economic Statistics*; CHADDOCK, *Principles and Methods of Statistics*; YULE, *Introduction to the Theory of Statistics*; BOWLEY, *Introductory Manual of Statistics*, and *Elements of Statistics*; FORSYTH, *Mathematical Analysis of Statistics*; FISHER, *Making of Index Numbers*; MITCHELL, *Index Numbers of Wholesale Prices in the United States and Foreign Countries* (Bulletin 284 of U.S. Bureau of Labour Statistics); *Labour*

*Gazette* (Ottawa); *Canada Year Book*, *Census Reports* of Canada, Great Britain, U.S.A., publications of the Royal Statistical Society and the American Statistical Association, and other publications to be indicated from time to time. Three hours a week.

3d. Public Finance and Administration. Economic functions of the state; principles and incidence of taxation; national and local finance; public debts and their redemption; revenue systems of modern states; central and local administration. Books recommended: SHIRRAS, *Science of Public Finance*; LUTZ, *Public Finance*; BULLOCK, *Selected Readings in Public Finance*; SELIGMAN, *Essays in Taxation, Incidence of Taxation, The Income Tax, Progressive Taxation*; BROWN, *Economics of Taxation*; KENNAN, *Income Taxation*; VINEBERG, *Dominion and Provincial Taxation in Canada*; GRICE, *National and Local Finance*; VILLARD and WILLOUGHBY, *Canadian Budgetary System*; WILLOUGHBY, WILLOUGHBY and LINDSAY, *Financial Administration of Great Britain*. Three hours a week.

3e. Economic Theory. For Pass students. Books recommended: ADAM SMITH, *Wealth of Nations*; MALTHUS, *Essay on Population*; RICARDO, *Political Economy*; MILL, *Principles of Political Economy*; CANNAN, *Theories of Production and Distribution*; MARX and ENGELS, *The Communist Manifesto*; GIDE and RIST, *History of Economic Doctrines*; DAVENPORT, *Value and Distribution*; LEVINSKY, *The Founders of Political Economy*; SPARGO, *Socialism*; BASTABLE, *Public Finance*; STAMP, *Principles of Taxation*; SELIGMAN, *Essays in Taxation*. Three hours a week.

3f. Political Theory. A study of theories of the state based on MACHIAVELLI, HOBBS, LOCKE, ROUSSEAU, MILL and GREEN.

4a. Advanced Economic Theory. A course dealing with the evolution of economic thought through the principal schools from Adam Smith to the present, and giving special attention to the criticism of current theories of value, interest, rent and wages. Books recommended: ADAM SMITH, *Wealth of Nations*; MALTHUS, *Essay on Population*; RICARDO, *Principles of Political Economy*; J. S. MILL, *Principles of Political Economy*; MARX, *Capital*; BÖHM-BAWERK, *Capital and Interest*, and *The Positive Theory of Capital*; MARSHALL, *Principles of Economics*, and *Industry and Trade*; CANNAN, *Theories of Production and Distribution*; HOBSON, *Economics of Distribution*; J. B. CLARK, *Distribution of Wealth*; DALTON, *Inequalities of Income*; HANEY, *History of Economic Thought*; GIDE and RIST, *History of Economic Doctrines*. Three hours a week.

4b. Transportation. Railway accounts and rates; principles of rate making as established by the railways, the regulative tribunals and the courts; railway policy in Canada and the other chief countries; railway rate structures; organization of ocean commerce; ocean freight-rates; shipping conferences and their results; relations of ocean and land transportation interests; inland water transportation; highway transportation. Books recommended: JACKMAN, *Economics of Transportation*; HANEY,

*The Business of Railway Transportation*; JONES, *Principles of Railway Transportation*; JOHNSON AND HUEBNER, *Principles of Ocean Transportation*. Three hours a week.

4c. Corporation Finance. Economic service of corporations; capitalization; detailed study of stocks and bonds; financing of extensions and improvements; management of incomes and reserves; dividend policy; insolvency; receiverships; reorganizations. Books recommended: LINCOLN, *Applied Business Finance*, and *Problems in Business Finance*; NELSON, *Readings in Corporation Finance*; CONYNGTON, *Financing an Enterprise*; LOUGH, *Business Finance*; DAGGETT, *Railroad Reorganizations*; DEWING, *Corporate Promotions and Reorganizations*; GERSTENBERG, *Materials of Corporation Finance*. Two hours a week.

4d. Economic History of Canada and the United States. The course is an attempt to estimate the significance of economic factors in the growth of western civilization on the North American continent. Three hours a week.

4e. Political Theory. A study of the nature, functions, institutions, and limits of the modern state, led up to by a comparative study of political evolution. Books recommended: HOBBS, *Leviathan*; LOCKE, *On Civil Government*; ROUSSEAU, *Social Contract*; SIDGWICK, *Elements of Politics*; BARKER, *Political Thought from Spencer to the Present Day*; LASKEI, *Studies in the Problems of Sovereignty; Authority in the Modern State*; and *Grammar of Politics*; DUGUIT, *The Law and the State*; JENKS, *The State and the Nation*; OPPENHEIMER, *The State*; OSTROGORSKI, *Democracy and the Organisation of Political Parties*; LOWELL, *Public Opinion and Popular Government*; GOODNOW, *Principles of Constitutional Government*; MCBAIN AND ROGERS, *The New Constitutions of Europe*; MACIVER, *The Modern State*. Three hours a week.

4f. Rural Economics. A study of rural interests from the standpoint of economic principles; the economy of land, labour and capital in agriculture; the problems of ownership and tenancy; rural credits; transportation in its vital relation to agriculture; the problems of marketing farm products; principles underlying the proper adjustment of rural and urban industries; rural social economy. Books recommended: Publications of the International Institute of Agriculture; reports of government and educational institutions dealing with important phases and problems of agriculture in Canada, England and United States; FAY, *Co-operation at Home and Abroad*; CHERINGTON, *The Elements of Marketing*; BENTON, *Marketing of Farm Products*; HERRICK, *Rural Credits*; MORMAN, *Form Credits in the United States and Canada*; CARVER, *Principles of Rural Economics*; TAYLOR, *Agricultural Economics*. Two hours a week.

4g. Business Administration. In each term a course of special lectures on a selected field of Canadian finance or industry will be given by lecturers practically conversant with its problems. One hour a week.

4h. A General Sketch of Economic History. For pass students. Books recommended: ASHLEY, *Economic Organisation of England*; KNOWLES, *Industrial and Commercial Revolutions in Great Britain during the 19th Century*; FAY, *Life and Labour in the 19th Century*; BOGART, *Economic History of the United States*. Three hours a week.

4i. Special Subject. The special subject for the year 1927-1928 will be the development of the mining industries in Northern Ontario.

4j. Advanced Economic Geography. A seminar course on the growth of modern trade. An attempt will be made to predict probable changes in the more immediate future in the direction and character of the world's trade. Two hours a week.

4k. Comparative Politics. A comparative study of legislative chambers, electoral franchises, electoral constituencies, organization of political parties, the initiative and referendum, proportional representation, etc.

## LAW

W. P. M. KENNEDY, M.A., LLT.D.

*Professor of Law and Political Institutions.*

N. A. M. MACKENZIE, B.A., LL.M. . . . . *Associate Professor.*

J. F. DAVISON, B.A., LL.M. . . . *Lecturer in Roman Law and Jurisprudence.*

3a. History of English Law. Anglo-Saxon Customs and Dooms; the Norman century, feudal tenures and Church Courts; reforms of Henry II. Foundation of the Common Law: writs and jury-trial. Legislation of Edward I; expansion of the Common Law, growth from Writ of Trespass: equity; development by legislation and decisions; struggle between Chancery and Common Law Courts in the reign of James I; reform by equity; legislation and Common Law before the Reform Bill period; rigidity of the Equity system; progress by legislation in England and Ontario. For reference: MAITLAND AND MONTAGUE, *A Sketch of English Legal History*; POLLOCK AND MAITLAND, *History of English Law* (Book I); HOLDSWORTH, *A History of English Law* (last edn.); JENKS, *Short History of English Law*; POTTER, *An Introduction to the History of English Law* (2nd edn.).

3b. Roman Law. Principles of Roman Law and of the Civil Law and Modern Codes as developments thereof—an introduction to Comparative Law.

3c. English Constitutional Law. A study of the nature of English constitutional law; parliament and its rivals; parliamentary privileges; freedom of the person; freedom of discussion; freedom of assembly; "martial" law; the law of soldiers and sailors; the crown and its officers; growth of administrative law; alienage and naturalization; the judicial system. For reference: BELLOT, *Thomas's Leading Cases in Constitutional Law* (5th edition); BICKNELL, *Cases on Constitutional Law*; FORSYTH,

*Cases and Opinions on Constitutional Law*; WILLIAMS, *Ridges's Constitutional Law of England* (3rd edition); ANSON, *Law and Custom of the Constitution* (Vol. I, ed. Gwyer; Vols. II and III, last edition); EMDEN, *Principles of British Constitutional Law*; *The Civil Servant in the Law and the Constitution*; ROBINSON, *Public Authorities and Legal Liability*. Reported cases.

3d. Canadian Administrative and Municipal Law. A course dealing with local government and with administration by public bodies.

4a. Canadian Constitutional Law. A course dealing specially with the distribution of executive and legislative powers under ss. 91-95 of the British North America Act, 1867. For reference: CLEMENT, *Law of the Canadian Constitution*, Part II (3rd ed., 1916); LEFROY, *Short Treatise on Canadian Constitutional Law*; *Legislative Power in Canada*; CAMERON, *The Canadian Constitution and the Judicial Committee*. Reported cases.

4b. A course in Federal Law and Institutions. A comparative study of the distinctive features of the constitutions of the following federal or semi-federal common-law countries:—the United States, Canada, Australia, South Africa, the Irish Free State. For reference: MARTIN, *An Introduction to the Study of the American Constitution*; HAINES, *The American Doctrine of Judicial Supremacy*; GERSTENBERG, *Constitutional Law*; EVANS, *Cases in American Constitutional Law*; COOLEY, *Constitutional Limitations*; ROSE, *Jurisdiction and Procedure of the Federal Courts* (3rd edition); KEITH, *Responsible Government in the Dominions*; *War Government in the Dominions*; KENNEDY, *The Constitution of Canada*; MOORE, *The Commonwealth of Australia* (2nd ed.); QUICK, *Legislative Power in Australia*; KERR, *The Law of the Australian Constitution*; NATHAN, *The South African Commonwealth*; MACNEILL, *Studies in the Constitution of the Irish Free State*. Reported cases.

4c. Jurisprudence. Theory of law and legislation; the province of the written and unwritten law. Problems of law reform.

4d. International Law, with special reference to inter-paternal relations; the development of international organizations, particularly in connection with the League of Nations. For reference: OPPENHEIM, *International Law*, Vol. I (3rd ed. 1920); HALL, *International Law* (8th ed. 1924); SCOTT, *Cases in International Law*; MOON, *Syllabus on International Relations*; BUELL, *International Relations*; BAKER, *The League of Nations*; HUDSON, *The Permanent Court of International Justice*; FACHIRI, *The Permanent Court of International Justice*; JOHNSON, *The International Labour Organization*; BARNES, *History of the International Labour Office*. Certain cases, including some of the recent decisions and advisory opinions of the Permanent Court, and others of special interest to Canada will be discussed.

4e. Problems of Commercial Law. A course dealing with the formation of a binding contract; how to avoid or to enter the relation of partnership;

the liabilities of principals for agents; how to control the activities of Letters Patent and Statutory companies with special reference to Canada; special commercial courts v. arbitration. For reference: GELDART, *Elements of English Law*; ANGER, *Digest of Canadian Mercantile Law*; STEVENS, *Elements of Mercantile Law*; cases and relevant statutes.

### ANTHROPOLOGY

T. F. McILWRAITH, M.A. . . . . Assistant Professor.

SIR B. C. A. WINDLE, M.A., M.D., Sc.D., Ph.D., LL.D., F.R.S

*Special Lecturer in Ethnology.*

1a. Primitive Life. A study of the social, political and religious institutions of primitive man. The following topics are included: (1) A brief outline of the principal races of man. (2) The social life of primitive peoples, including social groupings, marriage, rank, property and justice. (3) The religious life of primitive peoples; animism, animatism, the psychological aspects of primitive religion, magic and taboo. Books recommended: HADDON, *Races of Man*; RIVERS, *Social Organization*; LOWIE, *Primitive Religion*. One and one-half hours a week.

2a. Primitive Society. A course dealing with the distribution of the races of man, and the social and religious aspects of the lives of primitive peoples. Books recommended: HADDON, *Races of Man*; RIVERS, *Social Organization*; LOWIE, *Primitive Society*; LOWIE, *Primitive Religion*; MARETT, *Anthropology*. Two hours a week.

### PUBLIC LECTURES

A special course of twelve lectures by Sir Bertram Windle in the Easter term.

### ACCOUNTING

W. S. FERGUSON . . . . . Lecturer.

1a. Accounting: Introductory course in accounting principles and their application in business of sole traders, partnerships and joint stock companies; operating accounts and balance sheets. Texts for reference: KESTER, *Accounting—Theory and Practice*, Vol I; SPROTT AND SHORT, *Canadian Modern Accounting*; SCOVILLE, *Elementary Accounting*, Part I; SMAILS AND WALKER, *Accounting Principles and Practice*. Two hours a week.

2a. Accounting, advanced: A critical examination of the theory and practice of accounting, the preparation of financial statements, partnership and corporation adjustments, sinking funds, domestic and foreign branches, consolidated statements, income tax. Texts for reference: KESTER, *Accounting—Theory and Practice*, Vols. 1, 2 and 3; HATFIELD, *Modern Accounting*; DICKINSON, *Accounting Practice and Procedure*; SPICER AND PEGLER, *Bookkeeping and Accounts*; SMAILS AND WALKER, *Accounting Principles and Practice*. Two hours a week.



3a. Cost Accounting: Principles of cost accounting, system of control over elements of cost, wage systems and time records, overhead and its distribution, job orders and process costs, relation of cost records to general accounts. Texts for reference: NICHOLSON AND ROHRBACH, *Cost Accounting*; EGGLESTON AND ROBINSON, *Business Costs*; JORDAN AND HARRIS, *Cost Accounting, Principles and Practice*; HAWKINS, *Cost Accounts*; NEWLOVE, *Cost Accounts*; SCOVELL, *Cost Accounting and Burden Application*. One hour a week.

3b. Auditing: Principles of and procedure in audits, internal and external, scope and kinds of audits, office organization, internal check, analysis and reconstruction of operating and financial statements, reports to executives, treatment of special items affecting accounts and statements, special features in different business and financial organizations, legal decisions. Texts for reference: MONTGOMERY, *Auditing, Theory and Practice*, Vols. 1 and 2; DICKSEE, *Auditing*; SPICER AND PEGLER, *Practical Auditing*; KOHLER AND PETTENGILL, *Principles of Auditing*. One hour a week.

# PHILOSOPHY

## UNIVERSITY OF TORONTO:

J. G. HUMB, A.M., PH.D.,	<i>Professor of History of Philosophy</i> (on leave of absence).
G. S. BRETT, M.A.,	<i>Professor.</i>
T. R. ROBINSON, PH.D.,	<i>Associate Professor.</i>
F. H. ANDERSON, M.A., PH.D.,	<i>Assistant Professor.</i>
C. A. BAXTER, B.A.,	<i>Class Assistant.</i>

## UNIVERSITY COLLEGE:

F. TRACY, B.A., PH.D.,	<i>Professor of Ethics.</i>
------------------------	-----------------------------

## VICTORIA COLLEGE:

W. B. LANE, M.A., PH.D.,	<i>Professor of Ethics.</i>
W. T. BROWN, M.A., PH.D.,	<i>Professor of Ethics.</i>

## TRINITY COLLEGE:

REV. G. F. KINGSTON, B.D., PH.D.,	<i>Professor of Ethics.</i>
-----------------------------------	-----------------------------

## ST. MICHAEL'S COLLEGE:

REV. D. CUSHING, LL.D.,	<i>Professor Emeritus.</i>
REV. H. CARR, B.A., LL.D.,	<i>Professor of History of Philosophy.</i>
SIR BERTRAM C. A. WINDLE, M.A., PH.D., M.D., Sc.D., M.Sc., LL.D., F.R.S.,	<i>Professor of Anthropology.</i>
REV. E. J. MCCORKELL, M.A.,	<i>Professor of Social Ethics.</i>
REV. H. S. BELLISLE, M.A.,	<i>Professor of Logic.</i>
M. DEWULF, PH.D., LL.D.,	<i>Professor of Mediæval Philosophy.</i>
REV. W. J. ROACH, B.A.,	<i>Professor of Ethics.</i>
REV. B. SULLIVAN, M.A.,	<i>Lecturer in Social Ethics.</i>

## PASS COURSES

2a. Introductory Course. (i) Logic. A course on the place and function of Reason in experience according to (a) the biological classification of functions, (b) the Aristotelian method, (c) idealistic construction of experience; the status of the Person in relation to Nature and Society (typical historical views); common sense and the conditions of scientific method: the basal concepts of the natural sciences, law, cause and effect, space, time, evolution; the distinction between normative and descriptive sciences; analysis of the validity and utility of this distinction in reference to the problem of social values and their objectivity. Two hours a week. (ii) Introduction to Ethics. The basis of morals in human nature; the influence of heredity and environment; standards, motives and sanctions of conduct; application to the problems of personal conduct and social relations. One hour a week.

3a. Social Ethics; The study of social conditions and problems in their ethical aspects. (1) History of moral ideas and customs; the process of ethical development in early society; Greek ethics, with special reference to the social and political ethics of Plato and Aristotle, and including the later Greek systems (Stoic and Epicurean); the influence on world civilization of Greek, Hebrew, Roman and early Christian moral and social ideals. (2) Theory of morals; the leading problems of moral philosophy and typical proposed solutions. (3) Social problems; the ethical aspects of modern economic, political and social conditions. Prescribed texts: SETU, *Ethical Principles*; selections from PLATO, *Republic*; ARISTOTLE, *Nicomachean Ethics* and *Politics*. References: DEWEY AND TUFTS, *Ethics*; DRAKE, *Problems of Conduct*; BAKEWELL, *Source Book in Ancient Philosophy*; MYERS, *History as Past Ethics*; ROGERS, *Short History of Ethics*; TOWNE, *Social Problems*. Three hours a week.

3b. History of Philosophy. Primitive thought and the origins of western civilization; the early Greek schools and the relations between philosophy and science; the Sophists and the growth of humanism; Socrates and the Greek Enlightenment; the constructive philosophy of Plato; the philosophy of Aristotle; criticism in the classical period, the Aristotelian theory of tragedy; the later schools of Hellenism (Stoic, Epicurean, Sceptic). Texts: PLATO, *Republic*; ARISTOTLE, *Ethics*. References: GOMPERZ, T., *Greek Thinkers*, i; BURNET, J., *Greek Philosophy*; ADAMSON, R., *Development of Greek Philosophy*; HICKS, R. D., *Stoic and Epicurean*. Three hours a week.

3c. Logic. Outline of the development of modern scientific methods and their influence on theories of mind and society, with special reference to the naturalistic, romantic and evolutionary periods. (NOTE.—This course connects the Logic of the Second Year with the Psychology offered for students of the Fourth Year in Economics and Law). Texts: Selections from BACON, HOBBS, LOCKE and HUME; J. S. MILL, *Logic*, Book VI. Ref-

erences: WINDELBAND, *History of Philosophy*; HÖFFDING, *Brief History of Modern Philosophy*; DUNNING, W. A., *Political Theories*, Vol. II; DAVIDSON, W. L., *Political Thought from Bentham to J. S. Mill*; GINSBERG, M., *Psychology of Society*. Three hours per week.

4a. Modern Ethics. The lectures will be (a) Historical, tracing the rise and development of the leading problems of ethics, and the formation of the chief schools and systems, Hedonist, Intuitionist, etc.; (b) Expository and critical. The following texts will be studied in the class, and their doctrines examined: HOBBS, *Leviathan*; HUME, *Enquiry concerning the Principles of Morals*, with Appendices; J. S. MILL, *Utilitarianism*; SPENCER, *Data of Ethics*; J. G. HUME, *Young's Ethics of Freedom*; GREEN, *Prolegomena to Ethics*. Three hours a week.

4b. Modern Philosophy. Outline of modern movements from the Revival of Learning to the present time, including (a) the origins of modern philosophy, (b) British Philosophy and the French Enlightenment, (c) the rise and development of idealism in Germany, (d) the new psychology in the nineteenth century, and (e) the influence of Darwin on modern thought. Emphasis will be laid on the connection between philosophical theories and the general culture of the periods reviewed. Texts: LOCKE, *Essay on the Human Understanding* (select chapters); HUME, *Enquiry Concerning Human Understanding*; KANT (Watson's Selections); RUSSELL, B., *Problems of Philosophy*. References: (a) General: WINDELBAND, *History of Philosophy*; HÖFFDING, *Modern Philosophy*, or *Brief History of Modern Philosophy*; ROGERS, A. K., *Student's History of Philosophy*. (b) Special: HIBBEN, J. G., *Philosophy of the Enlightenment*; SETH, A., *English Philosophers and Philosophical Schools*; ADAMSON, R., *Kant*; ROYCE, J., *Lectures on Modern Idealism*; PERRY, R. B., *Present Philosophical Tendencies*. Three hours per week.

#### HONOUR COURSES

1a. Ethics. Introductory Course. Studies in character, conduct and moral values. Prescribed text: JOHNSON, *An Introduction to Ethics*. Two hours a week.

2b. Ethics. Elementary Course. Outline study of the subject matter and method of Ethics, with its leading problems and schools. Ethical development among the Hebrews, Greeks and Romans. Prescribed texts: MACKENZIE, *Manual of Ethics*; Selections from the Old Testament; PLATO, *Republic*; ARISTOTLE, *Nicomachean Ethics*; CICERO, *De Finibus*, and from other Greek and Roman writers, as given in BAKEWELL, *Source Book in Ancient Philosophy*. References: ROGERS, *Short History of Ethics*; MUIRHEAD, *Elements of Ethics*; SETH, *Ethical Principles*; DEWEY AND TUFTS, *Ethics*; WATSON, *Hedonistic Theories*; SMITH, *The Moral Life of the Hebrew People*. Two hours a week.

2c. Logic. Introductory Course. Lectures on the nature of thought, the history and method of science and the theory of knowledge. Text:

D. S. ROBINSON, *Principles of Reasoning*. References: PLATO, *Theaetetus*; ARISTOTLE, *Organon* (Selections); J. S. MILL, *Logic* (selected chapters); BOSANQUET, *Essentials of Logic*. Two hours a week [First Term].

2d. History of Philosophy. Development of philosophy from Descartes to Hume. The philosophical theories of Descartes, Locke, Berkeley and Hume will be studied with direct reference to the texts. Texts: Selected portions of DESCARTES, LOCKE, BERKELEY, HUME. Three hours a week.

3d. Ethics. English Ethics from Hobbes to Spencer, with special attention to the Ethics of Naturalism. Exposition and criticism of Hedonism, Utilitarianism, and Evolutionism, in relation to the general trend of English thought and life in the period covered. Prescribed texts: HOBBS, *Leviathan*; HUME, *Enquiry concerning the Principles of Morals*; MILL, *Utilitarianism*; SPENCER, *Data of Ethics*; together with other selections, from RAND, *Classical Moralists*, or SELBY-BIGGE, *British moralists*. References: ALBEE, *History of English Utilitarianism*; WATSON, *Hedonistic Theories*; SORLEY, *The Ethics of Naturalism*; MARTINEAU, *Types of Ethical Theory*; RASHDALL, *Theory of Good and Evil*. Two hours a week.

3e. Systematic Philosophy. Texts: SPINOZA and LEIBNIZ. One hour a week.

3f. History of Philosophy. Plato, Aristotle, Hellenistic philosophy (Stoic, Epicurean, Sceptic), Christian Platonism, Mediaeval thought, the Renaissance and the Revival of Learning. The subject matter will be the development of classical philosophy in the works of Plato and Aristotle: the union of Greek and Hebrew thought in the Alexandrian age; the relation of philosophy, science and religion in the Roman Empire; the history of doctrine in the Middle Ages, and the beginning of Modern Philosophy. Texts: PLATO, *Republic*; ARISTOTLE, Selections from *Nicomachean Ethics*, *Politics* and *Poetics*; AUGUSTINE, *Confessions*; BACON, *Advancement of Learning*, *Novum Organum*. References: WINDELBAND, *History of Philosophy*; DE WULF, *History of Mediaeval Philosophy*; TAYLOR, H. O., *Mediaeval Mind*; HÖFFDING, *Modern Philosophy*, Vol. I; K. FISCHER, *Francis Bacon*; BRETT, G. S., *History of Psychology*, Vol. II; SEDGWICK AND TYLER, *History of Science*. Three hours a week.

4c. Ethics (i). Rationalism and Idealism. Exposition and criticism of the Ethics of Kant and T. H. Green. Discussion of selected problems in Ethics. Prescribed texts: KANT, *Groundwork of the Metaphysic of Ethics*, and *Critique of Practical Reason*; GREEN, *Prolegomena to Ethics*. References: CAIRD, *The Critical Philosophy of Kant*; WATSON, *The Philosophy of Kant Explained*. Two hours a week.

4d. Ethics (ii). Social Philosophy. (1) The evolution of society; philosophy of social progress, its nature and the forces directing it. (2) Theories of the mutual relation of the state and the individual; grounds of political obligation. (3) Modern social conditions and problems. References: URWICK, *A Philosophy of Social Progress*; GREEN, *Principles*

of *Political Obligation*; ELWOOD, *Sociology and Modern Social Problems*; TODD, *Theories of Social Progress*; OGG, *Social Progress in Contemporary Europe*; HOBHOUSE, *Social Development*; PARK AND BURGESS, *Introduction to the Science of Sociology*. Two hours a week.

4e. Modern Philosophy. Lectures on the main currents of philosophical thought in the nineteenth century with special reference to the literary and scientific movements. The course includes the Critical Philosophy, the Romantic movement, Positivism, the development of modern psychology in relation to philosophy, the influence of Evolutionism on modern thought. References: HÖFFDING, *Modern Philosophy*; ROGERS, *English and American Thought Since 1800*; PERRY, *Present Philosophical Tendencies*; MERZ, *A History of European Thought in the Nineteenth Century* (select chapters). Two hours a week [First Term].

4f. Modern Logic: KANT AND HEGEL, Seminar for students in Philosophy. Thesis. Texts: KANT, *Critique of Pure Reason*; HEGEL, *Logic*. Two hours a week.

4g. Philosophical Literature: Seminar for students in Philosophy (English or History Option) (based on 4e). Texts as selected for the current year. Thesis. Two hours a week.

5. Selected texts. Students who elect this option will be required to study one or more selected texts approved by the Department. The work is done under the direction of the staff, but formal instruction is not necessarily provided.

## PHILOSOPHY—ST. MICHAEL'S COLLEGE

### PASS COURSES

2e. Introduction to Philosophy. Prescribed texts: PLATO, *Republic*; ARISTOTLE, *Politics*; CICERO, *De Finibus*. Three hours a week.

3f. General Philosophy. Modern physical and chemical views in relation to the conception of matter and form; the uniformity of the Universe and the orderliness of Nature; proofs of the existence of God; the argument from the design. The cell and cellular life; bio- and abiogenesis; development; vegetable and animal kingdoms; vitalism; geology and early man; races of mankind; transformism; the origin of man. Three hours.

3g. An outline course in the History of Philosophy.

3h. Ethics. Definition and Scope. Human Acts. Meaning of Good and Evil. Moral Criteria. Freedom and Morality. The problem of Duty. Various theories of the Moral Ideal. Consequences of Morality. Habits and Virtues. Law. Rights. Prescribed text: CRONIN, *Science of Ethics*, Vol. 1. Three hours a week.

4g. A course in the Philosophy of St. Thomas. Three hours a week.

4h. Same as 3g.

4i. Social Ethics. A course of lectures on the Social Virtues. Text: CRONIN, *Science of Ethics*.

## HONOUR COURSES

2f. Introduction to Philosophy. Prescribed texts: PLATO, *Republic*; ARISTOTLE, *Politics*; CICERO, *De Finibus*. Two hours a week.

2g. An outline of Greek philosophic thought. Two hours a week.

2h. Logic. The standpoint and problem of Logic: important stages in the development of Logic; the syllogism; the problem of induction; assumptions of induction; the laws of thought; types of judgment; nature of inference; science and philosophy; philosophy as the interpretation of the sciences. Prescribed texts and Readings: COFFEY, *Science of Logic*; JOYCE, *Principles of Logic*; BUTCHER, *Aspects of Greek genius, Essay on the Unity of Learning*. Two hours a week.

2i. Seminar in Logic. Special Problems arising from the reading of NEWMAN's *Grammar of Assent* and ARISTOTLE's *Organon*. One hour a week.

2j. Ethics. Definition and Scope. Human acts. Meaning of Good and Evil. Moral Criteria. Freedom and morality. The problem of Duty. Various theories of the moral ideal. Consequences of morality. Habits and Virtues. Law, Rights. Prescribed texts: CRONIN, *Science of Ethics*. Three hours a week.

3i. General Philosophy. Modern physical and chemical views in relation to the theory of Matter and Form; the uniformity of the Universe, and the orderliness of Nature; proofs of the existence of God; the argument from design. The cell and cellular life; bio- and abiogenesis; development; vegetable and animal kingdoms; vitalism; geology and early man; races of mankind; transformism; the origin of man. Three hours a week.

3j. Logic. The problems of epistemology, scepticism, positivism, dogmatism; exposition and criticism of each; knowledge of the external world; critical study of the problem of knowledge from the neo-scholastic viewpoint; the criteria of valid knowledge. Text: COFFEY, *Epistemology*. Two hours a week.

3k. Seminar in Logic. Selected texts.

3l. Social Ethics. Nature and Function of the Family and of the State. Text: CRONIN, *Science of Ethics*; RYAN AND MILLER, *Church and State*.

3m. Seminar in Social Ethics. Selected readings from Plato, Aristotle, and St. Thomas.

3n. History of Mediaeval Philosophy. Two hours a week.

4j. A course in the Philosophy of St. Thomas. Two hours a week.

4k. Logic. An investigation of the grounds of certitude with special reference to modern philosophers. Two hours a week.

4l. Contemporary Thought. The anti-intellectual movement in relation to theodicy. The finite and evolving God. Immanence and Trans-

cendence. Pragmatic values, religious experience, dynamic idealism. The evolution of becoming. Emotion and sentiment as basis of belief. The value of intelligence. The theory of abstraction according to the Scholastics. Other views on abstraction. Discursive reason and intelligence. Metaphysical value of Potency and Act. God, Pure Act, Subsistent Being. Two hours a week.

Text : SHEEN, *God and Intelligence in Modern Philosophy*.

4m. A Seminar on Contemporary Thought.

4n. Social Ethics. A course of lectures on the problem of social justice. The Church and State; Social Mission of Charity. Readings: *Carlyle, Mediaeval Political Theory in the West*; BELLOC, *The Servile State*; PENTY, *A Guildsman's Interpretation of History*. Two hours a week.

4o. History of Modern Philosophy. Two hours a week.

4p. A dissertation on some selected topic in philosophy approved by the department.

#### PSYCHOLOGY—ST. MICHAEL'S COLLEGE

REV. G. B. PHELAN, M.A., PH.D. .... *Professor*.

1b. The problems of philosophical psychology. The nature of man. The soul as entelechy. Substantial union of soul and body. Spirituality and immortality of the soul. The ontological problem in knowledge. The problem of free will.

2g. General introductory course in scientific psychology. Psychological terms and their meaning. Sensorial content of perception. Quality, intensity, duration and extent as aspects of sensorial phenomena. Mental imagery. Feeling experience. The so-called higher processes of cognition. Dynamic processes and their influence in mental life. Instinct, emotion and will.

Laboratory demonstrations illustrating the methods of the qualitative study of experience.

3g. An outline of psycho-physics. Psychological measurements in various sensorial domains. Methods of interpreting statistical data. Mental tests and their applications.

Some special problem of mental measurement studied historically and critically.

Laboratory exercises exemplifying the principles of reaction measurements, introspective method and treatment of experimental data.

4g. (Same as third year) also, an informal discussion of some problem of psychological theory.

## PSYCHOLOGY

E. A. BOTT, B.A. ....	<i>Professor and Director of Psychological Laboratory.</i>
E. D. MACPHEE, M.A., B.EDUC. ....	<i>Assistant Professor.</i>
W. E. BLATZ, M.A., M.B., PH.D. ....	<i>Assistant Professor.</i>
S. N. F. CHANT, M.A. ....	<i>Lecturer.</i>
G. G. BROWN, M.A. ....	<i>Class Assistant.</i>
MISS D. D. HEARN. ....	<i>Research Assistant.</i>
J. D. KETCHUM, M.A. ....	<i>Class Assistant.</i>
M. U. KNECHTEL, M.A. ....	<i>Class Assistant.</i>
T. MUSTARD, M.A., B.PAED. ....	<i>Class Assistant.</i>

2a. Elementary Psychology. A course in fundamentals. Two hours lectures and demonstrations and one tutorial hour per week.

2b. Elementary Psychology. A course in general psychology for students of the Extension Department with special reference to problems of Education. Two hours per week.

2c. Introductory Course for students of the Biological and Medical Sciences. Two hours per week.

2d. Introduction to practical work. One hour per week, *i.e.* two hours for second term only.

3a. General principles of experimental psychology; lectures and laboratory. Three hours per week.

3b. Qualitative and quantitative laboratory course. Three hours per week.

3c. Practical laboratory course. Two hours per week, *i.e.* four hours for one term.

3d. Studies in psychological theory. One hour per week.

4a. Advanced general psychology. A study of methods and results of the applications of psychology to practical problems. Three hours per week.

4b. Applied psychology for students in Political Science. Psychological study of problems related to economics and industry. Two hours per week.

4c. Genetic psychology. Two hours per week.

4d. Systematic psychology. Two hours per week.

4e. Advanced experimental psychology. Two hours per week.

4f. Comparative psychology (readings). One hour per week for consultation.

4g. Selected problem or study as individual honour work.

Note—Students in an honour course other than Psychology or B. and M. who wish to count psychology as an honour subject should take two courses (4 hours) in each year, *i.e.*, 2a, 2d; 3b, 3d; 4c, 4d. In special cases fourth year honour students may select their courses subject to approval by the Department.



# FACULTY OF MEDICINE

3e. Special Psychology (compulsory third year). Twelve hours in the second term.

4h. Psychology of the abnormal mental processes (optional, fourth year Medicine). Two hours per week.

Note—Medical students who wish to take the Psychiatric Option are required to take psychology courses 2c, 3c, 4h. B. and M. students while undergraduates in Arts may elect from the following courses: in the second year 2c; third year (Easter term) 3c; fourth year 4c, 4e, 4f, 4g.

## COURSES FOR STUDENTS NOT PROCEEDING TO THE BACHELOR'S DEGREE

1a. General Psychology. One hour lecture and one hour tutorial instruction per week.

2e. Social and applied psychology. Two hours per week.

## MATHEMATICS

ALFRED BAKER, M.A., LL.D.	<i>Professor Emeritus.</i>
A. T. DELURY, M.A., LL.D.	<i>Professor.</i>
M. A. MACKENZIE, M.A.	<i>Professor.</i>
J. C. FIELDS, B.A., Ph.D., F.R.S.	<i>Professor.</i>
S. BEATTY, M.A., Ph.D.	<i>Professor.</i>
J. CHAPELON, D.ÈS SC.	<i>Professeur Agrégé.</i>
I. R. POUNDER, M.A., Ph.D.	<i>Associate Professor.</i>
W. J. WEBBER, B.A.	<i>Assistant Professor.</i>
D. A. F. ROBINSON, M.A.	<i>Lecturer.</i>
A. F. C. STEVENSON, M.A.	<i>Lecturer.</i>
MISS M. E. G. WADDELL, M.A.	<i>Instructor.</i>
MISS C. KRIEGER, M.A.	<i>Fellow.</i>
J. D. BURK, B.A.	<i>Fellow (on leave of absence).</i>
K. W. FOLLEY, M.Sc., M.A.	<i>Fellow.</i>
G. PALL, B.A.	<i>Fellow.</i>
MISS F. H. WIANCKO, M.A.	<i>Assistant.</i>

## PASS COURSES

1a. Algebra: Simple equations of one, two and three unknown quantities; quadratic equations of one and two unknown quantities; elementary treatment of variation, proportion and progressions; interest forms and annuities. Text-book: DELURY, *Intermediate Algebra*. One hour a week.

1b. Analytical Geometry: A course on elementary analytical geometry of two dimensions, establishing the more important properties of conic sections. Text-book: BAKER, *Analytical Geometry for Beginners*. One hour a week.

1c. Plane Trigonometry: Trigonometrical ratios, with their relations to one another; sines, etc., of the sum and difference of angles, with deduced formulae; solution of triangles; expressions for the area of a triangle; radii of circumscribed, inscribed and escribed circles. Text-book: HALL AND KNIGHT, *Elementary Trigonometry*. One hour a week.

1d. Algebra and Analytical Geometry: A review of permutations and combinations and a study of limits and series; a study of conic sections and a treatment of tangents in general. Three hours a week.

2a. Algebra: A course on limits and infinite series, serving as an introduction to the calculus. One hour and a half a week.

2b. Analytical Geometry: A review and extension of the earlier course in two dimensions, with special attention to graphs of functions, and an elementary course in three dimensions treating of the plane, the line, the sphere and the conicoids. One hour and a half a week.

3a. Differential and Integral Calculus: The elementary theory and applications. Three hours a week.

3b. History of Mathematics: The earlier period. One half hour a week.

3c. Differential and Integral Calculus: An extension of course 2g, designed to enable students to apply the calculus to problems arising in economics. Three hours a week.

4a. Calculus and Differential Equations: A continuation of the course in the Third Year, with an elementary course in differential equations. One hour a week.

4b. Geometry: A course on modern methods of treating pure geometry. Two hours a week.

4c. History of Mathematics: The later period. One half hour a week.

4d. Mathematics of Statistics. Three hours a week.

#### HONOUR COURSES

1g. Algebra: Limits; infinite series, with a special study of the binomial, exponential and logarithmic series; continued fractions; elementary number-theorems and determinants. Text-books: HALL AND KNIGHT, *Higher Algebra*; WALMSLEY, *Mathematical Analysis*; WILSON AND WARREN, *An Intermediate Algebra*; CRYSTAL, *Algebra*. Two hours a week.

1h. Introduction to Analysis. Text book: WALMSLEY, *Mathematical Analysis*. Two hours a week.

1i. Analytical Geometry: An advanced course. Text-book: C. SMITH, *Conic Sections*. Two hours a week.

1j. Spherical Trigonometry: Text-book: TODD HUNTER AND LEATHAM, *Spherical Trigonometry*. One half hour a week.

1k. Analytical Trigonometry: De Moivre's Theorem and a study of the more important trigonometrical infinite series and infinite products. Text-books: TODD HUNTER AND HOGG, *Plane Trigonometry*; HOBSON, *Trigonometry*. One half hour a week.

1f. Elementary Analysis: Limits; binomial, exponential and logarithmic series. Two hours a week.

2g. Differential and Integral Calculus: The elementary theory and applications. Text-book: OSGOOD, *Differential and Integral Calculus*. Two hours a week.

2h. Differential Calculus: An advanced course. Text-books: WILLIAMSON, *Differential Calculus*; LAMB, *Infinitesimal Calculus*; DE LA VALLÉE POUSSIN, *Cours d'Analyse Infinitésimale*, Vol. I. Two hours a week.

2i. Integral Calculus: An advanced course. Text-books: WILLIAMSON, *Integral Calculus*; LAMB, *Infinitesimal Calculus*; DE LA VALLÉE POUSSIN, *Cours d'Analyse Infinitésimale*, Vol. I. Two hours a week.

2j. Solid Geometry: An advanced course. Text-books: BELL, *Co-ordinate Geometry of three Dimensions*; C. SMITH, *Solid Geometry*. Two hours a week.

2k. Exercises on courses 2h, 2i, 2j preceding. Three hours a week.

3g. Differential Equations: Standard forms of first order and simple forms of higher order; linear equations with constant coefficients and general linear equations of second order. Text-books: COHEN, *Differential Equations*; CAMPBELL, *Differential Equations*. One hour a week.

3h. Theory of Equations: An elementary course, including applications to number-theory and geometry. Text-books: DICKSON, *Elementary Theory of Equations*; BURNSIDE AND PANTON, *Theory of Equations*. One hour a week.

3i. Differential Geometry: Space curves; envelopes and ruled surfaces; curvature of surfaces; lines on surfaces. Text-books: BELL, *Co-ordinate Geometry of three Dimensions*; GOURSAT-HEDRICK, *Mathematical Analysis*, Vol. I. Two hours a week.

3j. Theory of Functions of a Real Variable: The real number system; limits; sets; functions; continuity; aspects of uniformity; differentiation; integration; representations of functions. Green's theorem, Stokes' theorem, and allied results. Text-books: GOURSAT-HEDRICK, *Mathematical Analysis*, Vol. I; PIERPONT, *Theory of Functions of a real Variable*; DE LA VALLÉE POUSSIN, *Cours d'Analyse Infinitésimale*, Vol. I. Three hours a week.

3k. Modern Pure Geometry: Geometry treated from the non-metrical standpoint based on properties of alignment. Text-books: DURELL, *Plane Geometry for Advanced Students*; VEBLEN AND YOUNG, *Projective Geometry*, Vol. I. Two hours a week.

4g. Theory of Functions: Text-books: HARKNESS AND MORLEY, *Introduction to Analytic Functions*; FORSYTH, *Theory of Functions*. Two hours a week.

4h. Differential Equations: A more advanced course. Text-books: JOHNSON, *Differential Equations*; DE LA VALLÉE POUSSIN, *Cours d'Analyse Infinitésimale*, Vol. II. Two hours a week.

4i. Advanced Calculus: Implicit functions; definite integrals; multiple integration; etc. Text-book: GOURSAT-HEDRICK, *Mathematical Analysis*, Vol. I; DE LA VALLÉE POUSSIN, *Cours d'Analyse Infinitésimale*. Two hours a week.

4j. Modern Geometry: Text-books: DARBOUX, *Principes de Géométrie analytique*; DUPORCQ, *Premiers principes de Géométrie moderne*; DURELL, *Plane Geometry for Advanced Students*; VEBLEN AND YOUNG, *Projective Geometry*, Vol. I. Two hours a week.

4k. Quaternions: With outlines of other Space Analyses: Text-books: KELLAND AND TAIT, *Quaternions*; JOLY, *Manual of Quaternions*; TAIT, *Quaternions*. Two hours a week.

4l. Theory of Probability: Text-book: Article on "Probability" in the eleventh edition of the *Encyclopædia Britannica*. One hour a week.

4m. Higher Plane Curves: With introductory course in Modern Geometry. Text-books: SALMON, *Higher Plane Curves*; CLEBSCH, *Vorlesungen über Geometrie*. Two hours a week.

4n. Invariant Theory: Text-books: SALMON, *Higher Algebra*; ELLIOTT, *Algebra of Quantics*; GORDAN, *Invariantentheorie*; GRACE AND YOUNG, *Algebra of Invariants*. Two hours a week.

4p. Theory of Substitution Groups with applications to Algebraic Equations. Text-books: NETTO, *Theory of Substitutions* (translated by Cole); WEBER, *Lehrbuch der Algebra*; DICKSON, *Introduction to the Theory of Algebraic Equations*. Three hours a week.

4q. Exercises on courses 4g, 4h, 4j, 4p, preceding. Three hours a week.

Course 4l is an alternative course for Course 4a, Actuarial Science, offered for those students of the Fourth Year who have not taken Actuarial Science in the earlier years.

#### COURSES IN THE FACULTIES OF ARTS AND MEDICINE

1r. Elementary Analysis: A course on limits and infinite series, with a special study of the binomial, exponential and logarithmic series. One hour a week.

1s. Elementary Analytical Geometry. One hour a week.

2r. Differential and Integral Calculus: An elementary course, with special attention to applications. Two hours a week.

#### COURSES IN THE FACULTY OF APPLIED SCIENCE

1u. Elementary Calculus: Limits; an elementary course on differential and integral calculus, with simple applications. Two hours a week.

1v. Analytical Geometry: An elementary course, emphasizing the general method in this subject. One hour and a half a week.

2u. Differential and Integral Calculus: A more advanced course, with applications, and with supervision in solving problems. Two hours a week.

3r. Finite Differences: Methods and use of formulae; elementary mathematical statistics. Two hours a week.

### MECHANICS

W. J. LOUDON, B.A. .... *Professor.*

N. E. SHEPPARD, M.A. .... *Assistant Professor*

1a. Elementary Mechanics. Two hours a week during Michaelmas term.

2a. Elementary Statics and Dynamics. Two hours a week during the Easter term.

2b. Principles of Mechanics. One hour and a half a week.

3a. Elementary Mechanics: A course of lectures for Third Year Pass Course. One hour and a half a week.

3b. Advanced Statics. Three hours a week during Easter term.

3c. Particle Dynamics. Two hours a week during Michaelmas term.

4a. Rigid Dynamics. Two hours a week.

4b. Celestial Mechanics. Two hours a week.

4c. Method of Least Squares. One hour a week during the Easter term

### COURSE IN THE FACULTY OF APPLIED SCIENCE

5. Dynamics of Rotation. One hour a week.

### ACTUARIAL SCIENCE

M. A. MACKENZIE, M.A. .... *Professor.*

1a. Arithmetic: Decimals, interest and discount, annuities certain, bond values, etc. One hour a week.

2a. The Elements of the Theory of Life Annuities and Life Assurances. Two hours a week.

3a. The Theory of Life Contingencies: An advanced course, Part I. Two hours a week.

3b. Finite Differences and Statistics: Elementary methods and formulae. One hour a week.

4a. The Theory of Life Contingencies: An advanced course, Part II. Two hours a week.

## ASTRONOMY

C. A. CHANT, M.A., PH.D.....	<i>Professor of Astrophysics.</i>
R. K. YOUNG, B.A., PH.D.....	<i>Associate Professor.</i>
W. E. W. JACKSON, M.A. ....	<i>Class Assistant.</i>
W. M. BELL.....	<i>Class Assistant.</i>
H. J. DOWN.....	<i>Class Assistant.</i>

## PASS COURSE

1. Introduction to Astronomy: An elementary course dealing with the various astronomical phenomena, including systems of co-ordinates, the constellations, the solar system, eclipses, comets and meteors, nebulae, star-clusters, the evolution of the stars. Text-book: FATH, *Elements of Astronomy*. Two hours of lectures and two hours of practical work per week, including some night observations.

## PASS AND HONOUR COURSES

2. Elementary Astronomy: A course intended for students in the Science courses. Text-book: YOUNG, *Manual of Astronomy*. Two hours a week.

3. Elementary Practical Astronomy: Intended to accompany 2. Consisting of observation (including photography) of the heavenly bodies; together with exercises in simple astronomical measurements and in the use of almanacs, globes, star-maps, photographs, etc. Two hours a week, in afternoon or evening as arranged.

3a. General Astronomy: A course dealing chiefly with the celestial sphere and the motions of the heavenly bodies; also, the construction of star-maps. Text-book: YOUNG, *Manual of Astronomy*. Two hours of lectures and two hours of practical work per week, with some night observations.

4a. Physical Astronomy: In this course some of the modern problems of astronomy will be treated in an elementary manner, such as: determining the positions of the stars and their brightness, proper motions, parallaxes and statistics of the stars, together with the applications of the spectroscope in astronomy. Text-books: YOUNG, *Manual of Astronomy*; NEWALL, *The Spectroscope*. Two hours of lectures and two hours of practical work per week.

## HONOUR COURSES

4. Astronomy: A more advanced course. Text-books: ANDOYER, *Cours d'Astronomie*, tome i; *The Nautical Almanac*. For reference: BALL, *Spherical Astronomy*; CHAUVENET, *Spherical Astronomy*. Two hours a week.

5. Practical Astronomy: Observations with the equatorial telescope, the transit instrument and the sextant. By courtesy of the director of the Meteorological Observatory the astronomical instruments there are used by the students of the University. Text-book: CAMPBELL, *Practical Astronomy*. Two evenings a week.

6. Computation Course: A course for the discussion of astronomical observations and for computation, associated with Course 5. Two hours a week.

7. Introduction to Astrophysics. Text-books: STRATTON, *Astronomical Physics*; DINGLE, *Modern Astrophysics*. Two hours a week.

8. Practical Astrophysics: A laboratory course to accompany Course 7. One afternoon a week in the Michaelmas and two in the Easter term.

#### TEACHERS' COURSE

Introduction to Astronomy. An elementary course in which the various astronomical phenomena are discussed, including systems of co-ordinates, the constellations, the solar system, the nebulae, star clusters, evolution of the stars. Text-book: FATH, *Elements of Astronomy*.

#### PHYSICS

J. C. McLENNAN, O.B.E., Ph.D., D.Sc., LL.D., F.R.S.	<i>Professor and Director of the Physical Laboratory.</i>
E. F. BURTON, B.A., Ph.D.	<i>Professor.</i>
J. SATTERLY, M.A., D.Sc.	<i>Professor.</i>
L. GILCHRIST, M.A., Ph.D.	<i>Associate Professor.</i>
H. A. McTAGGART, Ph.D.	<i>Associate Professor.</i>
H. J. C. IRETON, M.A.	<i>Demonstrator and Research Associate.</i>
H. G. SMITH, M.A., Ph.D.	<i>Demonstrator and Research Associate.</i>
W. G. PLUMMER, M.Sc.	<i>Demonstrator and Research Assistant.</i>
C. BARNES, M.Sc.	<i>Demonstrator and Research Assistant.</i>
MISS K. M. CROSSLEY, B.A.	<i>Demonstrator.</i>
MISS B. M. REID, M.A.	<i>Demonstrator.</i>
MISS F. M. QUINLAN, M.A.	<i>Demonstrator.</i>
N. S. TAYLOR, M.Sc.	<i>Demonstrator.</i>
M. J. LIGGETT, M.A.	<i>Demonstrator.</i>
MISS E. J. ALLIN, B.A.	<i>Assistant Demonstrator.</i>
MISS M. C. M. McDONALD, B.A.	<i>Assistant Demonstrator.</i>
W. J. P. MILLS, B.A.	<i>Assistant Demonstrator.</i>
MISS M. E. WESTMAN, B.A.	<i>Assistant Demonstrator.</i>
A. B. McCLAY, M.A.	<i>Research and Technical Assistant.</i>
C. D. NIVEN, B.Sc., M.A.	<i>Research Assistant.</i>
M. F. CRAWFORD, B.A.	<i>Research Assistant.</i>
J. H. McLEOD, B.Sc., M.A.	<i>Research Assistant.</i>
H. S. WYNNE-EDWARDS	<i>Research Assistant.</i>
C. A. PEACHEY	<i>Lecture Assistant.</i>
MISS A. T. REED, B.A.	<i>Class Assistant and Secretary to the Department.</i>

The work of instruction in Physics consists of a series of courses of lectures and of practical work in the laboratories, which are embodied in the following schedule:

1. A course of seventy-five lectures on Properties of Matter, Mechanics, Hydrostatics and Heat. These lectures are illustrated by experiments. Text-books: EGGAR, *Mechanics*; WAGSTAFF, *Properties of Matter*; STEWART AND SATTERLY, *Text-book of Heat*.

2. Properties of Matter, Mechanics, Hydrostatics and Heat: A laboratory course of seventy-five hours, one afternoon a week, throughout the year, designed to illustrate the lectures in Course 1. Text-books: As for Course 1, also CLARK, *Mathematical and Physical Tables*.

3. Elementary Magnetism and Electricity: A course of thirty-five lectures, given in two divisions 3a and 3b. Text-books: HADLEY, *Magnetism and Electricity for Students*; SYLVANUS THOMPSON, *Electricity and Magnetism*; BROOKS AND POYSER, *Electricity and Magnetism*; WATSON, *A Text-book of Physics*; STEWART, *Electricity and Magnetism*; HUTCHINSON, *Advanced Magnetism and Electricity*; BARLOW, *Mathematical Physics*, Vol. I. STARLING, *Electricity and Magnetism*.

4. Elementary Light: A course of twenty-five lectures, one a week beginning in the Michaelmas term. Text-books: STEWART AND SATTERLY, *Text-book of Light*; EDSEER, *Light for Students*; WATSON, *A Text-book of Physics*; MARTIN, *Optical Measuring Instruments*.

5. Elementary Acoustics: A course of fifteen lectures, one a week. Text-books: CATCHPOOL, *Text-book of Sound*; POYNTING AND THOMSON, *Sound*; WATSON, *A Text-book of Physics*; D. C. MILLER, *The Science of Musical Sounds*.

The lectures in Courses 1, 3a, 3b, 4 and 5 are illustrated by experiments.

6. Magnetism, Electricity, Light and Acoustics: A laboratory course of one hundred and fifty hours, two afternoons a week throughout the year, designed to illustrate the lectures in Courses 3a, 3b, 4 and 5. Text-books: ALLEN AND MOORE, *Text-book of Practical Physics*; CARHART AND PATTERSON, *Electrical Measurements*; C. M. SMITH, *Electric and Magnetic Measurements*; EDSEER, *Light for Students*; CLAY, *Treatise on Practical Light*; CATCHPOOL, *Sound*.

7. A course of lectures and laboratory work in elementary physics including a special course in the geometrical optics of ophthalmic lenses and of the eye. Eight hours a week. Text-books: LAURANCE, *General and Practical Optics*; SOUTHALL, *Mirrors, Prisms, and Lenses*.

8. A series of lectures, being a portion of the first year Pass Course, on the principles and application of Science. Text-book: BURTON, *Lectures in General Physics*.

9. A course of lectures and laboratory work, four hours a week, for second year pass students. This course includes Properties of Matter,



Mechanics, Hydrostatics, and Heat. The lectures will deal with simple measurements, energy, gravitation and the pendulum, the general properties of solids, liquids and gases such as elasticity, viscosity and capillarity, the determination of fluid pressures, specific gravity and the theory and use of common forms of pumps, barometers, etc.; the thermal characteristics of various substances, including expansion, various thermometers, specific and latent heat and calorimetry; the phenomena observable during the change of state of substances from one form to another; conduction, radiation, heat and energy, the first and second laws of thermodynamics, engines; the liquefaction of gases and liquid air, the kinetic theory of matter. Text-books as for courses 1 and 2.

10. A course of lectures and laboratory work, four hours a week, for third year pass students. This course includes work in light and acoustics, and consists of a general explanation of wave motion, the reflection, refraction, diffraction and interference phenomena connected with wave motion; the production, propagation, and detection of sound waves; tuning forks, organ pipes and vibrating strings; various musical scales; analysis of complex sounds, the ear and voice; a study of mirrors, prisms and lenses; the eye, microscope, telescope and other optical instruments; dispersion, colour and spectroscopy; interference and diffraction; double refraction and polarisation; theories of light. Text-books as for Courses 4 and 5.

11. A course of lectures and laboratory work, four hours a week, for fourth year pass students. This course will consist of lectures and laboratory work in electricity and magnetism, including recent developments, such as radioactivity and radiology; laws of magnetism, static electricity, condensers, electrical conduction in solids, liquids and gases, voltaic cell, chemical, magnetic and heating effect of the electrical current, potential; Ohm's law and its application, laws of electrical resistance, electromotive forces, induced currents, the induction-coil, alternating and high frequency currents, electrical waves, X-rays and radioactivity. Text-books as for Course 3.

12. Applications of the theory of Potential to Physics and Electrical Measurements. A course of fifty lectures. Text-book: STARLING, *Electricity and Magnetism*.

13. Properties of Matter: A course of lectures, two a week beginning in the Michaelmas term. Text-books: POYNTING AND THOMSON, *Properties of Matter*; EDSE, *General Physics*.

14. Geometrical Optics: A course of lectures, one a week. Text-books: GLEICHEN, *Theory of Modern Optical Instruments*; HEATH, *Geometrical Optics*; SOUTHALL, *Mirrors, Prisms, and Lenses*.

15. Advanced Heat and Elementary Thermodynamics: A course of lectures, one a week. Text-books: POYNTING AND THOMSON, *Heat*; PRESTON, *Heat*; E. H. GRIFFITHS, *Thermal Measurement of Energy*; E. GRIFFITHS, *Methods of Measuring Temperature*.

16. Thermodynamics: A course of lectures on thermometry and pyrometry, gas and vapour equations and the fundamental principles of thermodynamics. Text-books as for Course 23.

17. A laboratory course on the accurate determination of physical constants, together with practice in laboratory arts. This course involves about one hundred and fifty hours' laboratory work. Text-books: ALLEN AND MOORE, *Text-book of Practical Physics*; WATSON, *A Text-book of Practical Physics*; SEARLE, *Experimental Harmonic Motion*; SEARLE, *Experimental Elasticity*; WORSNOP AND FLINT, *Practical Physics*.

18. Calculations for Science Students: A course of practical instruction in mathematical drawing, graphs and their applications, biological, mineralogical, chemical and physical calculations and their accuracy, elementary calculus and statistics. Text-books: TUTTLE AND SATTERLY, *Theory of Measurements*; S. P. THOMPSON, *Calculus Made Easy*; GOOD, *Practical Plane and Solid Geometry*; D'ARCY THOMPSON, *Growth and Form*.

19. Radiation, Radioactivity and Radiology. A course of 60 hours designed to give the student a knowledge of the phenomena of visible light waves, infra-red, and ultra-violet radiation, radioactive substances and the radiations emitted by them, X-rays and high frequency electric currents. CHADWICK, *Radioactivity and Radioactive Substances*; CROWTHER, *Ions, Electrons and Ionizing Radiations*; KROENIG AND FRIEDRICH, *Principles of the Physics and Biology of Radiation-Therapy*; LUCKIRSH, *Ultra-violet Radiation*; PRESTON, *Heat*; ROBERTSON, *X-rays and X-ray Apparatus*.

20. Theory of Optics: A course of lectures two a week throughout the year. Text-books: DRUDE, *Theory of Optics*; MANN, *Manual of Advanced Optics*; TAYLOR, *College Manual of Optics*; BALY, *Spectroscopy*; WOOD, *Physical Optics*; SCHUSTER, *Theory of Optics*; HOUSTON, *A Treatise on Light*; JOHNSON, *Practical Optics*.

21. Elasticity: A course of lectures, two a week throughout the year, dealing with the mathematical theory of elasticity with application to the theory of double refraction and polarisation of light. Text-books: POYNTING AND THOMSON, *Properties of Matter*; CHRISTIANSEN, *Elements of Theoretical Physics*; PELLAT, *Polarisation et Optique Crystalline*.

22. Fourier's Series: A course of lectures on Fourier's Series and its applications to Physics, one a week for half the year. Text-books: DONKIN, *Acoustics*; BYERLY, *Fourier's Series and Spherical Harmonics*; BARTON, *A Text-book on Sound*; CARSE AND SHEARER, *Fourier and Periodogram Analysis*; LAMB, *Dynamical Theory of Sound*; CARSLAW, *Fourier's Series and Integrals*; BYERLY, *Harmonic Functions*; EAGLE, *Fourier's Theorem and Harmonic Analysis*.

23. Thermodynamics: A course of lectures, one a week throughout the year. Text-books: POYNTING AND THOMSON, *Heat*; PARTINGTON, *Thermo-*

*dynamics*; MAXWELL, *Heat*; LEWIS, *System of Physical Chemistry*; WHETNAM, *Solution and Electrolysis*; PRESTON, *Heat*; FINDLAY, *The Phase Rule*.

24. Hydromechanics: A course of lectures, one a week for half the year. Text-books: MINCHIN, *Hydrostatics*; BESANT, *Hydro-mechanics*; LAMB, *Hydrodynamics*; BARTON, *Mechanics of Fluids*; RAMSEY, *Hydrodynamics*; BAIRSTOW, *Applied Aerodynamics*.

25. Colloidal Solutions: A course of lectures on the physical properties of colloidal solutions. Text-book: BURTON, *The Physical Properties of Colloidal Solutions*.

26. A course of seventy-five lectures on Electricity and Magnetism including the Electromagnetic Theory of Light, Electron Theory of Matter, Dispersion, Absorption, Polarisation, Magneto-Optics, Electrical Oscillations, Conduction of Electricity in Gases, and Radioactivity. Text-books: J. J. THOMSON, *Elements of Electricity and Magnetism, Recent Researches in Electricity and Magnetism, Conduction of Electricity through Gases*; ABRAHAM AND LANGEVIN, *Ions, Electrons, Corpuscles*; DRUDE, *Theory of Optics*; LORENTZ, *The Theory of Electrons*; N. R. CAMPBELL, *Modern Electrical Theory*; RUTHERFORD, *Radioactive Substances and their Radiations*; STARLING, *Electricity and Magnetism*; MILLIKAN, *The Electron*; J. H. JEANS, *Electricity and Magnetism*; O. W. RICHARDSON, *The Electron Theory of Matter*; LEON BLOCH, *Précis D'Électricité Théorique*.

27. A laboratory course designed as an extension of Course 17, and as an introduction to research work. Text-books: MANN, *Optics*; WATSON, *Practical Physics*; WORSNOP AND FLINT, *Practical Physics*; MAKOWER AND GEIGER, *Radioactivity*.

A seminar is held once a fortnight in connection with this course, under the supervision of the Director of the Laboratory, at which reports on papers in the current physical journals are presented and discussed.

28. A course of lectures and laboratory work, specially designed for students taking a one-year course in Physics. Text-books: BROWN, *Experimental Science, Physics*; DUNCAN AND STARLING, *Light and Sound*; STARLING, *Elementary Electricity*; HADLEY, *Magnetism and Electricity for Beginners*.

29. History of Physics: CAJORI, *History of Physics*; WHITTAKER, *History of the Theories of Aether and Matter*; LODGE, *Pioneers of Science*; *The History of the Cavendish Laboratory*; ARTHUR HAAS, *The New Physics*; SEDGWICK AND TYLER, *A Short History of Science*; PAUL F. MOTTSLAY, *Bibliographical History of Electricity and Magnetism*; MILLS, *The Realities of Modern Science*; SCHUSTER AND SHIPLEY, *Heritage of British Men of Science*; MACFARLANE, *Ten British Physicists, Ten British Mathematicians*.

30. High Frequency Alternating Currents: A course of twenty-five lectures.

31. Vector Analysis: A course of twenty-five lectures: COFFIN, *Vector Analysis*.

32. Course of lectures and laboratory work in light introductory to Astronomy. Four hours per week.

33. A course of seventy-five hours on the properties of X-rays and their use in the determination of crystal formation: ROBERTSON, *X-Ray and X-Ray Apparatus*; SIEGBAHN, *The Spectroscopy of X-Rays*; BRAGG AND BRAGG, *X-Rays and Crystal Structure*; WYCKOFF, *The Structure of Crystals*; DAVEY, *Study of Crystal Structure and its Applications*.

#### UNIVERSITY EXTENSION

34. University Extension Course. A general course of lectures and laboratory work in Physics dealing with Mechanics, Properties of Matter, Heat, Light, Sound, Electricity and Magnetism, to meet the needs of those intending to teach Physics in Secondary Schools.

#### REGULATIONS

*Deposit Fee:* Each student taking laboratory course 2, 6, 10, 11, 17, or 28 is required to make a deposit of three dollars (\$3.00) before beginning work. All supplies, apparatus broken or destroyed and all fines will be charged against this deposit, which must be renewed when exhausted. At the close of the session cash balances will be returned on a day appointed for the purpose.

#### ADDITIONAL TEXT-BOOKS

General Physics: WHITE, WATSON, GANOT, KIMBALL, HASTINGS AND BEACH, DESCHANEL (ed. Everett), JAMIN, VIOLE, NICHOLS AND FRANKLIN, BARLOW, THOMSON AND TAIT, LEHFELDT, MILLIKAN AND GALE, MANN AND TWISS, DANIELL, H. A. WILSON, HOUSTON, *An Introduction to Mathematical Physics*; DUNCAN AND STARLING, *Dictionary of Applied Physics* (ed. Glazebrook).

Elementary Mechanics: ASHFORD, GLAZEBROOK, BRIGGS AND BRYAN, LONEY.

Elementary Hydrostatics: GLAZEBROOK, BRIGGS AND BRYAN, LONEY.

Elementary Mechanics and Heat: GREGORY AND HADLEY.

Elementary Heat: GLAZEBROOK, TYNDALL, BALFOUR STEWART, TAIT, DRAPER, DARLING, SCARLETT, STEWART AND SATTERLY (*Senior Heat*).

Elementary Light: JONES, TYNDALL, TAIT, WRIGHT, GLAZEBROOK, EMTAGE.

Elementary Electricity and Magnetism: POYSER, GLAZEBROOK, LEHFELDT, CUMMING, DAY, ASHFORD, WAGSTAFF, HUTCHINSON, ASHFORD AND KEMPSON.

Sound: TYNDALL, TAYLOR, CAPSTICK, ZAHM, BRAGG.

Geometrical Optics: HERMAN, ALDIS, HEATH, PARKINSON, PERCIVAL, WHITTAKER, LEATHAM, SEARLE, SOUTHALL, *Geometrical Optics and Elementary Optics*; S. P. THOMPSON, *Optical Tables and Data*; VON ROHR, *Theory of Optical Instruments*, trans. by R. Kantchack, and A. GLEICHEN, *Theory of Modern Optical Instruments*, trans. by Elmsly and Swain; HOUSTON, *A Treatise on Light*.

Mechanics: PERRY, *Applied Mechanics*; BARTON, *Analytical Mechanics*; COX, *Mechanics*; THOMSON AND TAIT, LAMB, *Dynamics, Statics*; CRABTREE, *Spinning Tops and Gyroscopic Motion*; PERRY, *Spinning Tops*.

Hydromechanics: GREENTHILL, BASSETT, BARTON, *Mechanics of Fluids*, *The Mechanical Properties of Fluids* (collective work).

Sound (or Acoustics): DONKIN, RAYLEIGH, HELMHOLTZ, AIRY, KOENIG, LAMB, BARTON.

Elasticity: WILLIAMSON, LAMB, IBBETSON, LOVE, TODD HUNTER, SEARLE.

Physical Optics: DRUDE, JAMIN, VERDET, BASSET, GLAZEBROOK, MACLAURIN, MASCART, SCHUSTER, WOOD, PRESTON, POYNTING (*Pressure of Light*), GEHRECKE, MALLIK, KAYSER, WALKER.

Heat and Thermodynamics: CLAUDIUS, BUCKINGHAM, PARKER, WHITIAM, PLANCK, PRESTON, MAXWELL, TAIT, PARTINGTON, DONNAN, LEWIS (*Physical Chemistry*); GIBBS, EWING (*The Production of Cold*); EWING (*The Steam Engine*); HORNS (*The Thermo-dynamics of engine design*); CLAUDE (*Liquid Air, Oxygen, Nitrogen*); DARLING (*Pyrometry*); LE CHATELIER, GRIFFITH, (*Pyrometry*); R. BLONDELOT, *Introduction à l'étude de la Thermodynamique*; PHILLIPS, *Radiation*; W. N. SHAW, *Forecasting weather*; LEMPERT, *Meteorology*; ABERCROMBY, *Weather*; BIRTWISTLE, *Thermodynamics*; WOOD, *Joule and the Doctrine of Energy*.

Properties of Matter: MEYER, *Kinetic Theory*; JEANS, *Dynamical Theory of Gases*; DARLING, *Liquid Drops and Globules*; TAIT, *Properties of Matter*; EDSEER, *General Physics*; FINDLAY, *Osmotic Pressure*; PHILIP, *Physical Chemistry*; BOYS, *Soap Bubbles*; WILLOWS AND HATCHEK, *Surface Tension*; MCEWEN, *Properties of Matter*; BLOCH, *Kinetic Theory of Gases*; POYNTING, *The Earth*; JOLY, *Surface History of the Earth*; DARWIN, *Tides*; BRAGO, *On the Nature of Things*.

Electricity and Magnetism: POYNTING AND THOMSON, ENTAGE, MAXWELL, MASCART AND JOUBERT, GRAY, HEAVISIDE, DUBOIS, STRUTT, SODDY, FOURNIER D'ALBÉ, ECCLES, BARLOW (*Mathematical Physics*, Vol. 1); JAMES (*Alternating Currents*); DRYSDALE (*Alternating Currents*); LIVEN, HUTCHINSON; TURNER, *Wireless Telegraphy and Telephony*; SCOTT-TAGGART, *Wireless*; HOUSTON, *An Introduction to Mathematical Physics*; GREENWOOD, *Wireless Telegraphy and Telephony*; PIDDUCK.

Colloidal Solutions: BURTON, TAYLOR, HATSCHEK, SVEDBERG, OSTWALD, BANCROFT, BOGUE, JEROME, ALEXANDER, RIDEAL.

Relativity: CONWAY, CUNNINGHAM, ROBB, SILBERSTEIN, TOLMAN, EDDINGTON, CARMICHAEL, LAWSON, FREUNDLICH, CARR, EINSTEIN, WEYL, BECQUEREL, BIRKHOFF; BERTRAND RUSSELL, *ABC of Relativity*.

History of Physics: MACH, *Science of Mechanics*; BALL, *History of Mathematics*; MAXWELL, *Cavendish Electrical Researches*.

Modern Theories: COMSTOCK AND TROLAND, DUNCAN, BRAGG (*X-rays and Crystal Structure*); SODDY, KAYE (*X-rays*); J. J. THOMSON, RUTHERFORD, CROWTHER (*Molecular Physics; Ions and ionising radiations*), CHADWICK, SOMMERFELD, ANDRADE (*Structure of the Atom*); RICHARDSON (*The Electron Theory of Matter*); CHADWICK (*Radioactivity*); SOMMERFELD (*Atomic Structure and Spectral Lines*); ASTON (*Isotopes*); JEAN BECQUEREL (*Le Principe de Relativité*); CERMAK, *Röntgenstrahlen*; DAUVILLIER, *La Technique des Rayons X*; M. DE BROGLIE, *X Rays*; GENERAL ELECTRIC CO., *X Ray Studies*; GÜNTHER, *Tabellen zur Röntgenspektalanalyse*; KAYE, *X Rays*; HILGER, *Optical Methods in Control and Research Laboratories*; KAYE, *Practical Applications of X Rays*; LEDOUX-LEBARD ET DAUVILLIER, *La Physique des Rayons X*; NATIONAL RESEARCH COUNCIL, *X Ray Bulletins*; MANGUIN, *La Structure des Cristaux*; NIGGLI, *Geometrische Kristallographie des Diskontinuum*; TUTTON, *Crystallography and Practical Crystal Measurements*; WALKER, *Crystallography*; ELLIS AND WELLS, *Chemical Action of Ultra-Violet Light*; BACHEM, *Principles of X-ray and Radium Dosage*; COLWELL AND RUSS, *Radium and X-rays*.

Practical Physics: LOUDON AND MCLENNAN, STEWART AND GEE, BARNES, GLAZEBROOK AND SHAW, KOHLRAUSCH, FINDLAY, SCHUSTER AND LEES, SEARLE.

Practical Mathematics (and Mechanics): SAXELBY, CASTLE, CARSE AND SHEARER (*Periodogram analysis*); GIBSON (*Graphs*); MINCHIN AND DALE, STERN AND TOPHAM, PERRY; GIBSON (*Graphs*); DE BRAY, *Exponentials made Easy*; BRODETSKY, *Nomography*; LIPKA, *Graphic and Mechanical Computation*; FELDMAN, *Biomathematics*; BALL, *Mathematical Recreations and Essays*; SANDEN, *Practical Mathematical Analysis*.

Calculus (suitable for Physics students): EDWARDS, EDSER, LODGE, PROCTOR, BLAINE, MERCER, PERRY (for Engineers), GIBSON, MELLOR (*Higher Mathematics for students of Physics and Chemistry*), GRAHAM, ORMSBY, GODFREY AND SIDDONS, LOVE, LAMB, PIAGGIO (*Differential Equations*).

Theory of Measurements and Errors: LUPTON, STEVENS, MACGREGOR, GOODWIN, TUTTLE, HOLMAN, MERRIMAN, JOHNSON, BOWLEY, UDN YULE, JONES, BRUNT, WHITTAKER AND ROBINSON.

Mathematical and Physical Tables: BOTTOMLEY, CASTLE, CLARKE, CHAMBERS, DALE, HALL, KAYE AND LABY, MACFARLANE, MCAULAY, the Smithsonian, LONGLEY, WOODWARD, CHAPPELL, SILBERSTEIN, COSENS.

The Slide Rule: BLAINE, DUNLOP AND JACKSON.

# BIOLOGY

R. R. WRIGHT, M.A., B.Sc., LL.D.....	<i>Professor Emeritus.</i>
B. A. BENSLEY, B.A., Ph.D.....	<i>Professor of Zoology.</i>
W. H. PIERSON, B.A., M.B.....	<i>Professor of Histology and Embryology.</i>
E. M. WALKER, B.A., M.B.....	<i>Professor of Invertebrate Zoology.</i>
A. G. HUNTSMAN, B.A., M.B.....	<i>Associate Professor of Marine Biology.</i>
A. F. COVENTRY, B.A.....	<i>Associate Professor of Vertebrate Embryology.</i>
J. R. DYMOND, M.A.....	<i>Assistant Professor of Systematic Zoology.</i>
J. W. MACARTHUR, M.A., Ph.D.....	<i>Assistant Professor of Genetics.</i>
W. H. T. BAILLIE, M.A., M.B.....	<i>Assistant Professor of Mammalian Anatomy.</i>
E. H. CRAIGIE, B.A., Ph.D.....	<i>Assistant Professor of Comparative Anatomy and Neurology.</i>
W. J. K. HARKNESS, M.A.....	<i>Lecturer in Limnobiology.</i>
MISS N. H. C. FORD, B.A., Ph.D.....	<i>Lecturer in Biology.</i>
A. W. H. NEEDLER, B.A.....	<i>Assistant in Systematic Biology.</i>
W. E. STEENBURGH, B.A.....	<i>Assistant in Systematic Biology.</i>
C. C. BROWN, PHM.B., M.B.....	<i>Class Assistant.</i>
D. FINDLAY, M.B.....	<i>Class Assistant (Easter Term).</i>
MRS. L. S. FISHER, B.A., M.B.....	<i>Class Assistant (Easter Term).</i>
MRS. R. M. FRANKS, M.B.....	<i>Class Assistant.</i>
MRS. N. M. GILBERT.....	<i>Class Assistant (Easter Term).</i>
K. L. HAMILTON.....	<i>Class Assistant (Easter Term).</i>
J. T. MCCOSH, M.B.....	<i>Class Assistant.</i>
A. E. McCULLOCH, B.A., M.B.....	<i>Class Assistant (Michaelmas Term).</i>
MISS J. E. MILLSAP.....	<i>Class Assistant (Michaelmas Term).</i>
A. L. PRITCHARD, B.A.....	<i>Demonstrator.</i>
E. L. SEXSMITH, M.B.....	<i>Class Assistant.</i>
D. S. RAWSON, B.A.....	<i>Research Assistant.</i>
J. B. SMITH, B.S.A.....	<i>Research Assistant.</i>
L. A. SMITH, B.A.....	<i>Class Assistant.</i>
F. C. HAMILTON, B.A., M.B.....	<i>Instructor (Easter Term).</i>

*Courses extending over only the Michaelmas or the Easter term are indicated as (m) and (e) respectively.*

With the exception of Course I, the lectures and practical instruction in this department are given in the University Biological Building. The instruction includes courses in General Biology, Zoology, Comparative Anatomy, Histology and Embryology, these courses being indicated in the various prescriptions as Zoology 2, 3, 4, etc.

For supplementary reading, except as specified below, the General Reading List of the Department may be consulted.

The following courses are provided:

## PASS COURSES

1. General Science: A course of seventy-five lectures on the general principles and applications of science. This is a co-operative course, given

by members of the departments of Physics, Chemistry, Geology, Botany and Zoology.

2. Elementary Biology: (a) A general educational course of two hours a week on the principles of science as applied to living organisms. The instruction is chiefly zoological, emphasis being placed upon the history of animal types and upon the biological aspects of the nature and social development of mankind. (b) A practical course of fifty hours in illustration of the principles and laboratory methods of Biology.

Subject to the approval of the Department, students who desire training as nature study officers or teachers may substitute for a part of this course special work on the habits and classification of Ontario animals from selected groups.

3. Invertebrate Zoology: A course of one hundred hours of lectures and laboratory work on the lower animals with special reference to their environmental relations and adaptations. Text-book: BORRADAILE, *The Animal and its Environment*. For reference: BORRADAILE, *A Manual of Elementary Zoology*; PARKER AND HASWELL, *Text-book of Zoology*, Vol. 1.

4. Vertebrate Zoology: A course of one hundred hours lectures and laboratory work on the principal branches of zoology as applied to vertebrates, with special reference to those of human application.

#### HONOUR COURSES

5. Elementary Zoology: A course of two lectures a week throughout the Easter term on the nature, structure and classification of animals. For Honour Science students.

6. Elementary Zoology: A laboratory course of seventy-five hours on the general structure of the animal body, its organs and tissues and their functions; principles of adaptation, specialisation, and homology, based on selected types. Text-book: HEGNER, *College Zoology*. For reference: PARKER AND HASWELL, *Text-book of Zoology* (e).

7. Comparative Anatomy: A laboratory course of one hundred and fifty hours, comprising dissection and comparative study of selected vertebrate types: Part 1, Mammalian Anatomy (m); Text-book: DENSLY, *Anatomy of the Rabbit*; Part 2, Anatomy of Lower Chordates (c). For reference: PARKER, *Zoology*; KINGSLEY, *Vertebrate Zoology*; PARKER AND HASWELL, *Text-book*, Vol. 2; WIEDERSHEIM, *Comparative Anatomy*; REYNOLDS, *Vertebrate Skeleton*; KINGSLEY, *Comparative Anatomy, Vertebrate Skeleton*; NEWMAN, *Vertebrate Zoology*.

8. Vertebrate Zoology: A course of twenty-five lectures on the system, structure and history of the vertebrates. For reference, as above (7); GADOW, *Classification of Vertebrates*; SMITH WOODWARD, *Vertebrate Palaeontology*; WILDER, *History of the Human Body*.

9. Invertebrate Zoology: A course of twenty-five lectures and seventy-five hours laboratory work on the system and morphology of the invertebrates. Text-book: VAN CLEAVE, *A Manual of Elementary Zoology*; For reference: PARKER AND HASWELL, Vol. I (m).



10. A course on mammalian anatomy and histology. For Household Science students (m).

11. Parasitology: A course of fifty hours lectures and laboratory work on the parasites of man. Text-book: CHANDLER, *Animal Parasites and Human Disease*. For reference: PARKER AND HASWELL, *Text-book of Zoology*, Vol. I; FANTHAM, STEPHENS AND THEOBALD, *Animal Parasites of Man*; RILEY AND JOHANNSEN, *Medical Entomology*; DOANE, *Insects and Disease*.

12. Zoological Collection: Students entering the Third Year in the special course of Biology are required to submit, as evidence of field proficiency, a collection of invertebrate animals from a prescribed group, together with an essay on the character and habits of the forms collected. Special directions may be had on application to the Biological Department.

13. Vertebrate Embryology: A course of twenty-five lectures on the embryology of the vertebrates.

14. A course of one hundred hours on limnobiology with special reference to the economic biology of fresh-water organisms.

15. Problems of Biology: An opportunity is afforded to advanced students to become acquainted with the main problems of biology, and literature connected therewith. The instruction includes lectures and conferences conducted by different members of the staff, and a course of prescribed reading. The library is provided with the various works for consultation, a partial statement of which will be found in the departmental reading list.

16. History of Biological Science: A course dealing with the historical development of the biological branches.

17. Vertebrate Embryology: A laboratory course of one hundred hours on the general embryology of the vertebrates. For reference: JENKINSON, *Vertebrate Embryology*; HERTWIG, *Lehrbuch der Entwicklungsgeschichte*; LILLIE, *Development of the Chick*; BAILEY AND MILLER, *Embryology*; KELLICOTT, *General Embryology, Chordate Development*; PRENTISS, *Text-book of Embryology*; GRAHAM KERR, *Embryology*; MARSHALL, *Physiology of Reproduction*; PATTEN, *Embryology of the Pig*.

18. A course of one hundred hours on the principles and practical methods of genetics.

19. Structural Neurology: A course of lectures and laboratory work on the structure and development of the mammalian nervous system. For reference: EDINGER, *Anatomy of the Nervous System*; HERRICK, *Introduction to Neurology*.

20. Comparative Neurology: A course of sixty hours lectures and laboratory work, designed to follow Course 19 or Anatomy 2. In this course is presented an outline of the evolutionary development and significance of the internal anatomy of the central nervous system. For reference: KAPPEL, *Vergleichende Anatomie des Nervensystems der Wirbeltiere und des Menschen*.

21. Zoological Collection: Students entering the Fourth Year in any one of the subdivisions of Biology are required to submit a collection of vertebrate animals from specified groups, together with an essay on the characters and habits of the forms collected. For reference: JORDAN, *Manual of Vertebrates*.

22. A lecture and laboratory course of one hundred hours on general invertebrate and vertebrate histology and cytology, including histological technique. Text-book: DAHLGREN AND KEPNER, *Principles of Animal Histology*. For reference: WILSON, *The Cell in Development and Inheritance*; GURWITSCH, *Morphologie und Biologie der Zelle*; SCHNEIDER, *Histologie der Thiere*; PRENANT, BOUIN, MAILLARD, *Traité d'Histologie* (Vol. I, Cytologie); SHARP, *Introduction to Cytology*.

23. Vertebrate Zoology: A practical course of one hundred hours of laboratory and museum work on the morphology, classification and distribution of the vertebrates. For reference: GADOW, *Classification of Vertebrates*; FLOWER and LYDEKKER, *Mammals Living and Extinct*; LYDEKKER, *Geographical History of Mammals*; Cambridge *Natural History*, Vols. vii-x; REYNOLDS, *The Vertebrate Skeleton*; FLOWER, *Osteology of the Mammalia*; SMITH WOODWARD, *Outlines of Vertebrate Palaeontology*; PARKER and HASWELL, Vol. 2; WILLEY, *Amphioxus*; WIEDERSHEIM, *Comparative Anatomy*.

24. Advanced Invertebrate Zoology: A course of one hundred hours of lectures, laboratory and museum work on the morphology, embryology, classification and distribution of the invertebrates. This course is also designed to give training in laboratory methods and microscopic technique. For reference: PARKER and HASWELL, Vol. I; HERTWIG's *Zoology*, edited by Kingsley; Cambridge *Natural History*, Vols. I-VI; KORSCHULT and HEIDER, *Embryology*; SCHNEIDER, *Histologie der Thiere*; selected papers; LEE, *Microtometist's Vade Mecum*; GUYER, *Animal Micrology*.

25. A special course of one hundred hours on the system and natural history of animals, with special reference to those of Ontario or of Canada.

Research: The members of the staff in this department are prepared to suggest problems for investigation in certain branches and to provide materials and laboratory facilities for properly qualified students. See "Calendar of the School of Graduate Studies."

#### COURSES IN THE FACULTY OF MEDICINE

Courses 26 and 27 (in part) are also taken by students of Public Health Nursing.

26. A course of ninety lectures serving as an introduction to the biological fields in relation to medicine. The topics include (1) the general nature of living organisms and of cell processes, (2) the types of lower organisms of interest to students in Medicine, (3) the elements of comparative anatomy, and (4) biological principles as applied to man.

27. A laboratory course of one hundred and eighty hours, including microscope practice, elementary experimental studies on the nature of cell processes, types of lower organisms, and a selected list of vertebrates.

28. An introductory course of fifty lectures on the principles of evolution heredity and eugenics. Second Year option.

29. A course of seventy-five hours laboratory work on embryology (including technique) with special reference to the problems of mammalian and human embryology. Third Year option.

30. A course of seventy-five hours laboratory work on advanced vertebrate histology and cytology, including technique. Third Year option.

31. Parasitology. Third Year option. See Course 11.

32. Problems of Biology. Third Year option. See Course 15.

33. Comparative Neurology. Third Year option. See Course 20.

#### COURSE IN THE FACULTY OF APPLIED SCIENCE

34. A practical course in experimental biology including the general principles of biology and microscope practice with the lower organisms.

#### COURSE IN THE FACULTY OF HOUSEHOLD SCIENCE

In addition to Courses 5, 6 and 10, which are taken by Household Science students, the following special course is provided:

35. A course on general biological principles and on vertebrate anatomy (e).

#### COURSES IN THE FACULTY OF FORESTRY

In addition to Courses 5 and 6, which are taken by students in Forestry, the following special courses are provided:

36. Forest Entomology; twenty-five lectures and fifty hours laboratory work (e). Text-book: FERNALD, *Applied Entomology*. For reference: FELT, *Insects of Park and Woodland Trees*.

#### COURSES IN THE FACULTY OF DENTISTRY

Courses 37 and 38 (in part) are also taken by students of Optometry.

37. A course of ninety lectures serving as an introduction to the biological fields in relation to Dentistry. The topics include (1) the cell-basis of structure and function, (2) elementary biological principles, (3) the chief types of organisms, including a review of vertebrate structure as an introduction to mammalian anatomy and comparative dental anatomy.

38. A course of one hundred and eighty hours of laboratory work on the fundamental reactions of organisms, their chief types, and the study of mammalian anatomy.

## UNIVERSITY EXTENSION

39. An elementary course on the general structure of the animal body, its organs and tissues and their functions; classification and natural history of the common animals of Ontario, with special attention to principles of specialization, adaptation and distribution. The course is designed to give the student training in scientific method and also to afford assistance in the teaching of nature study.

## BOTANY

J. H. FAULL, B.A., PH.D.....	Professor.
R. B. THOMSON, B.A.....	Professor of Phanerogamic Botany.
L. C. COLEMAN, B.A., PH.D.....	Professor of Plant Pathology.
H. B. SIFTON, M.A., PH.D.....	Assistant Professor.
G. H. DUFF, M.A., PH.D.....	Assistant Professor of Plant Physiology.
MISS J. G. WRIGHT, M.A., PH.D.....	Lecturer (on leave of absence).
MISS G. I. CAMERON, B.A., B.Sc.....	Assistant.
R. F. V. COOPER, B.S.A.....	Assistant.
G. D. DARKER, M.A.....	Assistant.
MISS D. F. FORWARD, B.A.....	Assistant.
J. L. VAN CAMP, B.Sc.F.....	Assistant.
R. S. WILLISON, M.A.....	Assistant.
C. B. PRICE.....	Class Assistant.

*Courses extending over only the Michaelmas or the Easter term are indicated as (m) and (e) respectively.*

The lectures and practical instruction in this subject are given in the Botany Building.

The following courses are provided:

## PASS COURSES

1. General Science Course. See pp. 281, 282.
2. Botany: A fundamental course on the structure and life of plants. Lectures, demonstrations, laboratory work and field trips. Four hours a week. Text-books: SINNOTT's *Botany, Principles and Problems*; BERGEN, *A Key and Flora* (Northern and Central States Edition); WHITE, *Forest Trees of Ontario*. For reference: LOCY, *Biology and its Makers*.
3. Cryptogamic Botany: A course on the structure, life history, classification and economic relationship of leading types of the main divisions of lower plants—such as bacteria, algae, fungi, mosses and ferns. Lectures, laboratory work and field trips. Four hours a week. For reference: CURTIS, *Nature and Development of Plants*; JONES, *Bacteria, Friends and Foes*; MCCUBBIN, *Fungi and Human Affairs*; ROLFE, *Romance of the Fungus World*; CLUTE, *Our Ferns in their Haunts*.

4. Ecology and Genetics: one part of the course deals with the physiological and adaptive relationships of plants, the other part with the general principles of heredity and plant breeding. Lectures, laboratory work, and field trips. Four hours a week.

#### HONOUR COURSES

5. Elementary Botany: A course of twenty-five lectures on the life structure and classification of plants. Text-book: F. O. BOWER's, *Botany of the Living Plant*. For reference: COULTER, BARNES AND COWLES, *Text-book of Botany*; CURTIS, *Nature and Development of Plants*; KERNER AND OLIVER, *Natural History of Plants* (m).

6. A laboratory course of fifty hours in connection with Course 5 (m).

7. Phanerogamic Botany: A course of twenty-five lectures and seventy-five hours laboratory work on the anatomy and morphology of the flowering plants. Text-book: STRASBURGER, JOST, SCHENCK AND KARSTEN, *Text-book of Botany*, 5th English Edition (1922) or *Lehrbuch der Botanik*, 16th German Edition, and GRAY, *New Manual of Botany*. For reference: COULTER, *Seed-Plants*; BRITTON AND BROWN, *An Illustrated Flora* (c).

8. Classification of Flowering Plants: A lecture and laboratory course of fifty hours in which representatives of the main divisions of the flowering plants are studied in illustration of the fundamental principles of classification. Reference is also made to distribution, especially of the local flora, and to the food plants and other economic plants of the group (m).

9. Botanical Collection: Students entering the Second Year in Biology are required to submit a collection of at least 100 species of flowering plants, properly pressed, classified, mounted and labelled. For reference: GRAY, *New Manual of Botany*; BRITTON AND BROWN, *An Illustrated Flora of the Northern United States and Canada*.

10. Phanerogamic Botany: A course of 100 hours dealing with the lower seed-plants, living and fossil. Text-book: COULTER AND CHAMBERLAIN, *Morphology of Gymnosperms*. For reference: SCOTT, *Fossil Botany*; PENHALLOW, *North American Gymnosperms*; DEBARY, *Comparative Anatomy of the Phanerogams and the Ferns*; JEFFREY, *Anatomy of Woody Plants*; EAMES AND MACDANIELS, *Introduction to Plant Anatomy*.

11. Phanerogamic Botany: A course of 100 hours dealing with the higher seed-plants. Text-book: COULTER AND CHAMBERLAIN, *Morphology of Angiosperms*. For reference: DEBARY, *Comparative Anatomy of the Phanerogams and the Ferns*; JEFFREY, *Anatomy of Woody Plants*; EAMES AND MACDANIELS, *Introduction to Plant Anatomy*.

12. Cryptogamic Botany: A lecture and laboratory course of one hundred and twenty-five hours on the system and morphology of the higher cryptogams. For reference: COULTER, BARNES AND COWLES, *Text-book of Botany*, Vol. I; CAMPBELL, *Mosses and Ferns*; BOWER, *Origin of a Land Flora* (m); GOEBEL, *Organographie der Pflanzen*.

13. Microbiology; an elementary course on the morphology and physiology of Bacteria, Yeasts and Molds for Household Science students. For reference: BUCHANAN, *Bacteriology*; MARSHALL, *Microbiology*; SAVAGE, *Bacteriological Examination of Food and Water*; CONN, *Bacteria, Yeasts and Molds in the Home*; TANNER, *Bacteriology and Mycology of Foods*; GUILLIERMOND-TANNER, *The Yeasts*; HEINEMAN, *Milk* (e).

14. Cryptogamic Botany; A lecture and laboratory course of one hundred and twenty-five hours on the system and morphology of the algae, fungi, bacteria, and slime molds. For reference: LISTER, *Mycetozoa*; JORDAN, *General Bacteriology*; FITTING, JOST, SCHENK AND KARSTEN, *Lehrbuch der Botanik*; GÄUMANN, *Vergleichende Morphologie der Pilze*; DUGGAR, *Fungous Diseases of Plants*; OLTMANN, *Morphologie und Biologie der Algen*.

15. Classification of cryptogams: A lecture and laboratory course of fifty hours in which representatives of selected groups of cryptogams are studied from the taxonomic standpoint. Reference is also made to distribution, especially of the local flora (e).

16. Botanical Collection: Students entering the Fourth Year in Biology are required to submit a collection of cryptogamic plants from prescribed groups.

17. Plant Physiology I: A course of 25 lectures and 75 hours laboratory work on the nutrition, assimilation, metabolism and growth of plants. For reference: ATKINS, *Some Recent Researches in Plant Physiology*; BAYLISS, *Principles of General Physiology*; GANONG, *The Living Plant*; HAAS AND HILL, *Chemistry of Plant Products*, Vol. II; JOST, *Plant Physiology*; MARSHALL, *Microbiology*; PALLADIN (Livingston), *Plant Physiology*; PFEFFER, *Physiology of Plants*; RUSSELL, *Soil Conditions and Plant Growth*; STILES, *Photosynthesis*.

18. Oecology and Plant Geography: A course on factors of habitat and the adaptations of plants to them; plant associations and their geographical distribution. As a prerequisite a collection of plants must have been made as indicated in paragraph 9. For reference: WARMING, *Ecology of Plants*; SCHIMPER, *Plant Geography*; COULTER, BARNES AND COWLES, *Text-book of Botany*, Vol. II; KERNER AND OLIVER, *Natural History of Plants*; TANSLEY AND CHIPP, *Aims and Methods in the Study of Vegetation*; TANSLEY, *Practical Plant Ecology*; RUSSELL, *Soil Conditions and Plant Growth*; HABERLANDT, *Physiological Plant Anatomy*; DEBARY, *Comparative Anatomy of the Phanerogams and Ferns*. One hundred hours.

19. Plant Physiology II: A course of 25 lectures and 75 hours laboratory work on the physiology of absorption and translocation; permeability, the water relations and tropistic reactions of plants. For reference: ATKINS, *Some Recent Researches in Plant Physiology*; BAYLISS, *Principles of General Physiology*; FINDLAY, *Physical Chemistry and its Applications in Medical and Biological Science*; GANONG, *The Living Plant*; JOST,

*Plant Physiology*; LIVINGSTON, *The Role of Diffusion and Osmotic Pressure in Plants*; OSTERHOUT, *Permeability and Electrical Conductivity of Living Tissue*; PALLADIN (Livingston), *Plant Physiology*; PFEFFER, *Physiology of Plants*; STILES, *Permeability*.

20. A lecture and seminar course on the history of Botany and on the general principles of Biology as related to botanical problems. A list of assigned literature is obtainable on application to the Department. Students proposing to take this course should secure this list at the close of their third year.

20a. Heredity and Plant Genetics: A lecture and laboratory course of one hundred hours.

21. Students in the Third and Fourth Years of the Special Course in Biology will be expected to show a reading knowledge of French and German.

22. Plant Pathology: A lecture, seminar, and laboratory course of one hundred hours on the diseases of plants. For references: SMITH, *Bacterial Diseases of Plants*; DUGGAR, *Fungous Diseases of Plants*; BUTLER, *Fungi and Plant Diseases*; SORAURER, *Handbuch der Pflanzenkrankheiten*; HESLER AND WHETZEL, *Manual of Fruit Diseases*; CHUPT, *Manual of Vegetable Garden Diseases*; HEALD, *Manual of Plant Diseases*.

23. Palaeobotany: A course of fifty hours on fossil plants.

24. Research studies on selected topics for advanced students. One hundred and fifty hours.

Research: The members of the staff in this department are prepared to suggest problems for investigation in certain branches and to provide materials and laboratory facilities for properly qualified students.

#### COURSE IN THE FACULTY OF APPLIED SCIENCE

25. A lecture and laboratory course of seventy-five hours on fundamental biological principles.

#### COURSE IN THE FACULTY OF FORESTRY

26. Forest Pathology: A lecture and laboratory course of seventy-five hours on the diseases of plants, especially of trees.

#### COURSE IN THE FACULTY OF HOUSEHOLD SCIENCE

27. Microbiology: An introduction to the elements of Microbiology with particular reference to the preparation and preservation of food materials. For reference: BUCHANAN, *Bacteriology*; JONES, *Bacteria—Friends and Foes*; SAVAGE, *Bacteriological Examination of Food and Water*; TANNER, *Bacteriology and Mycology of Foods*.

## UNIVERSITY EXTENSION

28. A course in Botany, with the emphasis on the Natural History of Plants, including a knowledge of the various types of plant life, and the classification, oecology and uses of both native and introduced forms. Some attention will also be given to the origin of our cultivated plants. The course is designed as a General Course in Botany to meet especially the needs of the Nature Study Teacher.

## ANATOMY

J. PLAYFAIR McMURRICH, M.A., Ph.D., LL.D.	Professor.
W. H. PIERSOL, B.A., M.B.	Professor.
J. C. WATT, M.A., M.D.	Associate Professor.
E. A. LINELL, Ch.B., M.D.	Associate Professor.
H. A. CATES, M.B.	Assistant Professor.
MISS M. I. TOM, B.A., M.B.	Research Assistant.
MISS C. H. CRAW	Research Assistant.
A. SKINNER, M.B.	Demonstrator.
H. G. WILLSON, B.A., M.D.	Demonstrator.
D. L. GUYATT, M.B.	Museum Preparator.
F. J. BELL, B.A., M.B.	Demonstrator.
J. A. FORREST, M.B.	Demonstrator.
L. H. A. R. HUGGARD, M.B.	Demonstrator.
A. S. LAWSON, M.B.	Demonstrator.
J. M. MACDONALD, M.D., C.M.	Demonstrator.
D. M. MEERISON, M.B., B.Sc.(Med.)	Demonstrator.
J. R. NADEN, M.B.	Demonstrator.
F. D. PLEWES, M.B.	Demonstrator.
F. J. SNELGROVE, B.A., M.B.	Demonstrator.
L. TESKEY, M.B.	Demonstrator.
M. <sup>rs</sup> C. WATSON, M.B.	Demonstrator.
H. DE W. BALL, M.B.	Demonstrator in Histology.
A. W. H. NEEDLER, B.A.	Demonstrator in Histology.
L. A. SMITH, B.A.	Demonstrator in Histology.
A. R. HAGERMAN, M.B.	Demonstrator on Neurology.
W. E. L. SPARKS, M.B.	Demonstrator in Neurology.

1. Practical Anatomy.—A lecture and laboratory course extending throughout the year.

2. Histology.—A course of lectures and laboratory work, extending throughout the year.

3. Embryology.—A course of lectures and laboratory work dealing with the development of the human body.



4. Anatomy of the Nervous System.—A course of three lectures a week, with demonstrations twice a week, throughout the Michaelmas term.

5. Practical Anatomy.—A laboratory course throughout the Michaelmas term. Two lectures a week throughout Easter term.

6. Anatomical Research.—Opportunities will be afforded to properly qualified students for carrying on investigation in anatomical problems.

Text-books: PIERSOL, *Human Anatomy*; MORRIS, *Human Anatomy*; CUNNINGHAM, *Text-book of Anatomy*; GRAY, *Anatomy*; BUCHANAN, *Manual of Anatomy*; *Guide to the Dissection of the Human Body*; SOBOTTA-MCMURRICH, *Atlas and Text-book of Human Anatomy*; SPALTEHOLZ, *Hand-Atlas of Human Anatomy*; TOLDT, *Atlas of Human Anatomy*; MCMURRICH, *The Development of the Human Body*; HERRICK, *Introduction to Neurology*; VILLIGER, *Brain and Spinal Cord*; BARKER, *The Nervous System*; RANSON, *The Anatomy of the Nervous System*; TREVES AND KEITH, *Surgical Applied Anatomy*; DAVIS, *Applied Anatomy*; BEESLEY AND JOHNSTON, *Surgical Anatomy*; JORDAN, *Textbook of Histology*; AREY, *Developmental Anatomy*; JORDAN AND KINDRED, *Embryology*; EYLESHEIMER AND JONES, *Hand-Atlas of Clinical Anatomy*; I. MACLAREN THOMPSON, *Elements of Surface Anatomy*; FRAZER, *Anatomy of Human Skeleton*; BAILEY, STRONG AND ELWYN, *Text-book of Histology*.

## BIOCHEMISTRY

### MEMBERS OF THE FACULTY OF MEDICINE

A. HUNTER, M.A., B.Sc., M.B., CH.B.	Professor.
H. WASTENEYS, PH.D.	Professor.
MISS C. C. BENSON, B.A., PH.D.	Associate Professor of Physiological Chemistry in the Faculty of Household Science.
H. B. SPEAKMAN, M.Sc.	Associate Professor of Zymology.
MISS J. MCFARLANE, M.A.	Demonstrator.
W. B. EDMONDS, M.B.	Assistant.
A. M. GOULDING, B.A., M.D.	Assistant.
J. A. DAUPHINEE, M.A.	Fellow.
MISS V. E. DUNBAR, M.A.	Fellow.
D. A. MACFADYEN, B.Sc.	Fellow.
A. M. WYNNE, M.A., PH.D.	Senior Research Assistant in Zymology.
D. D. MCKAY, B.A.	Junior Research Assistant in Zymology.

The following courses of instruction, each extending throughout the session, are offered:

1. A course of lectures in General Biochemistry; three hours a week.
2. A course of lectures and conferences in Advanced Biochemistry; two hours a week.
3. A laboratory course in General Biochemistry; four to six hours a week.
4. An advanced laboratory course in Biochemistry; six or more hours a week.

5. A course of lectures on the Principles of Nutrition; two hours a week during the Michaelmas term. Open only to students who have taken Course 1.

6. Lecture course on Enzyme Chemistry. One half-hour a week.

7. Research in Biochemistry.

#### Text-books and Works of Reference:

(a) Elementary or General: HAMMARSTEN, *Text Book of Physiological Chemistry*; ABDERHALDEN-HALL, *Text Book of Physiological Chemistry*; MATHEWS, *Text Book of Physiological Chemistry*; ROBERTSON, *Principles of Biochemistry*.

(b) Advanced or Special: *Monographs on Biochemistry*, edited by Plimmer and Hopkins; ROBERTSON, *Physical Chemistry of the Proteins*; TAYLOR, *Digestion and Metabolism*; LUSK, *Science of Nutrition*; EFFRONT, *Biochemical Catalysts in Life and Industry*; EULER, *General Chemistry of the Enzymes*; ABDERHALDEN, *Biochemisches Handlexikon*; NEUBERG, *Der Harn*.

#### Laboratory Handbooks:

(a) Elementary: PLIMMER, *Practical Organic and Biochemistry*; HAWK, *Practical Physiological Chemistry*; FOLIN, *Laboratory Manual of Biological Chemistry*; HALLIBURTON, *Essentials of Chemical Physiology*; COLE, *Practical Physiological Chemistry*.

(b) Advanced: ABDERHALDEN, *Handbuch der biochemischen Arbeitsmethoden*; ELLINGER, *Analyse des Harns*.

## FOOD CHEMISTRY

### MEMBERS OF THE FACULTY OF HOUSEHOLD SCIENCE

MISS C. C. BENSON, B.A., PH.D. ....	Professor.
MISS J. R. PANTON, M.A. ....	Instructor.
MISS E. B. SHAW, B.A. ....	Assistant.
MISS A. K. SKINNER, B.A. ....	Assistant.

### HONOUR COURSES

1. A course of lectures, two a week, on the Chemistry of Foods and Nutrition.

2. A laboratory course on the Chemistry of Foods, with discussion of supplementary reading. Six hours a week.

3. An advanced laboratory course on the Chemistry of Foods and on problems of Nutrition.

4. Research work on Food Chemistry and Metabolism.

PASS COURSES

5. Chemistry of Food Constituents. Laboratory work for pass students of the Third Year. Two hours a week.

6. Composition of Foods. Chemistry of Foods with laboratory work in Qualitative and Quantitative analysis. Lectures and laboratory work for pass students of the Fourth Year. Four hours a week.

7. Elementary Food Chemistry. Lectures and laboratory work on the chemistry of food constituents; and on the chemistry and analysis of a few typical foods. Four hours a week.

8. Elementary Food Chemistry. A continuation of Course 7, including quantitative methods of food analysis and elementary study of metabolism. Six hours a week.

Text-books and works of reference include: WINTON, *Food Analysis*; LEACH, *Food Inspection and Analysis*; LUSK, *Science of Nutrition*; TINKLER AND MASTERS, *Applied Chemistry*, Vol. II, *Foods*; SNYDER, *Human Foods*; HALLIBURTON, *Essentials of Chemical Physiology*; Canadian and American bulletins on the chemistry of foods.

PHYSIOLOGY

J. J. R. MACLEOD, M.B., CH.B., LL.D., D.Sc., F.R.S. . . . . Professor.  
(on leave of absence, Easter Term).

E. G. MARTIN, PH.D. . . . . Exchange Professor (Easter Term).

J. M. D. OLMSTED, M.A., PH.D. . . . . Associate Professor.

N. B. TAYLOR, M.B., F.R.C.S. EDIN. . . . . Associate Professor.

I. L. CHAIKOFF, M.A. . . . . Demonstrator.

S. SOSKIN, M.B. . . . . Fellow and Research Assistant.

W. R. CAVEN, M.B. . . . . Fellow.

H. S. COULTHARD, M.B. . . . . Fellow.

J. J. WEBER, B.A. . . . . Fellow.

J. M. HARVEY, M.A. . . . . Part-time Fellow.

W. S. KEITH, B.A. . . . . Part-time Fellow.

D. J. BOWIE, B.Sc., M.A. . . . . Research Assistant.

E. FIDLAR, B.A., M.D. . . . . Research Fellow.

MISS N. R. HEARN. . . . . Research Assistant.

The following courses of instruction, each extending throughout the Session, are offered:

1. Systematic lectures and demonstrations in human physiology. Four hours a week.

2. Lectures in general physiology.

3. Advanced lectures. Two hours a week.

4. General laboratory courses. (Total of 135 hours.)

(a) Neuro-muscular Physiology.

(b) Circulation, respiration and digestion.

(c) Nervous system and special senses.

5. Laboratory course in general physiology.
6. Advanced laboratory courses.
7. Research in physiology.
8. Journal Club. One hour a week.
9. Elementary lectures on the principles of human physiology.
10. History of Physiology. A course of lectures supplemented by discussions. Two hours a week.

Text-books and works of reference: G. N. STEWART, *Manual of Physiology*; J. J. R. MACLEOD, *Physiology and Biochemistry in Modern Medicine*; STARLING's or HOWELL's *Physiologies*; BAYLISS, *General Physiology*; LUCIANI, *Physiology* (trans. by F. Welby); *Monographs in Physiology* (ed. by E. H. Starling). *Monographs in Experimental Biology* (ed. by J. Loeb and W. J. V. Osterhout). Other works important for consultation are MARSHALL, *Physiology of Reproduction*; SCHÄFER, *Endocrine Organs*; *Text-book of Physiology* (ed. by E. A. Schäfer); *Recent and Further Advances in Physiology* (ed. by Leonard Hill); C. S. SHERRINGTON, *Mammalian Physiology*; MACLEOD, *Carbohydrate Metabolism and Insulin*; LOVATT EVANS, *Recent Advances in Physiology*; T. R. PARSONS, *Fundamentals of Biochemistry*.

### CHEMISTRY

W. L. MILLER, B.A., PH.D.....	Professor of Physical Chemistry.
F. B. ALLAN, M.A., PH.D.....	Professor of Organic Chemistry, Secretary of the Department of Chemistry.
F. B. KENRICK, M.A., PH.D.....	Professor.
J. B. FERGUSON, B.A.....	Associate Professor.
J. T. BURT-GERRANS, PHM.B., PH.D.....	Associate Professor of Electrochemistry.
L. J. ROGERS, B.A.Sc., M.A.....	Associate Professor.
W. S. FUNNELL, M.A.....	Assistant Professor.
W. H. MARTIN, M.A., PH.D.....	Assistant Professor.
A. R. GORDON, M.A., PH.D.....	Lecturer.
F. M. ARCHIBALD, B.Sc., M.A.....	Assistant in Electrochemistry.
G. F. BROWN.....	Assistant.
A. F. W. COLE, B.A.....	Assistant.
J. CRYER, M.A.....	Assistant.
F. J. FARNCOMB, M.A.....	Assistant.
W. E. GRAHAM, M.A.Sc., M.A.....	Assistant in Electrochemistry.
H. R. L. HART, M.A.....	Assistant.
W. A. IRVINE, B.A.Sc.....	Assistant in Electrochemistry.
G. MACKINNEY, B.S.A.....	Assistant.
W. B. MATHER, B.A.....	Assistant.
L. L. PERKIN, B.A.....	Assistant.
H. DES B. SIMS, M.A.....	Assistant.
H. C. SMITH.....	Assistant.
E. M. SPARLING, M.A.....	Assistant.
MISS H. STANTIAL, S.B., M.A.....	Assistant and Research Assistant.

This subject forms part of the courses of study prescribed for students proceeding to degrees in Arts, Applied Science and Engineering, Household Science, Forestry, Medicine and Dentistry.

In the Honour Courses "Chemistry" and "Chemistry Mineralogy and Geology I" the laboratory work of the Fourth Year consists of research in one of the branches of chemistry; and arrangements have been made under which this work may be carried out by students of the "Chemistry" course either in the Chemical Laboratory or in the laboratories of the department of Chemical Engineering or of Biochemistry, and in the case of students in the "Chemistry Mineralogy and Geology" course either in the Chemical Laboratory or in the laboratories of the department of Chemical Engineering.

### LECTURES

The following courses are provided:

1. Elementary Chemistry: An introductory course in general chemistry with experimental illustrations. Two lectures a week.
2. A course of lectures on the influence of chemistry on the progress of civilization. Two lectures a week during session. Note—These lectures are intended for fourth year Pass students but if the class is too small to justify the giving of this course, Course 7 with appropriate laboratory work will be substituted.
3. Elementary Organic Chemistry: A course of experimental lectures on the systematic classification of the aliphatic compounds and some of the more common aromatic compounds. Two lectures a week.
4. Organic Chemistry: The work in Course 3 is reviewed and extended, fuller consideration being given to the isocyclic compounds. Two lectures a week.
5. Advanced Organic Chemistry: A course on heterocyclic compounds, synthetic methods and stereochemistry. Two lectures a week.
- 6a. History of Chemistry: A short course of lectures, commencing in January, on the development of chemistry and chemical theory.
- 6b. Essays on Prescribed Topics.
7. Elementary Physical Chemistry: An experimental course on the elements of chemical mechanics and electrochemistry. Two hours a week.
8. Elementary Electrochemistry: Twenty-five lectures illustrated by experiments.
9. A course on the application of geometry and the calculus to physico-chemical problems. Two hours a week.
10. Chemical equilibrium in two-component systems, based on the theory of chemical potential. Two hours a week.
11. Advanced Physical Chemistry. The phase rule, chemical thermodynamics, and chemical kinetics. Two hours a week.
- 12a. Applied Chemistry.
- 12b. Applied Organic Chemistry.

## LABORATORY WORK

13. Elementary quantitative chemistry.
14. Elementary quantitative chemistry (shorter course).
15. Analysis, chemical mechanics and organic preparations. Four hours a week.
16. Quantitative and qualitative analysis.
17. Analysis of minerals and rocks.
18. Analysis, organic preparations and physico-chemical measurements.
19. Practical organic chemistry.
20. Physico-chemical measurements, and electro-chemistry.
21. Research work for advanced students.
24. A short course of physico-chemical measurements, including electrical conductivity, migration, and freezing point of solutions.
25. Electrochemistry, to accompany lecture Course 8.
26. A laboratory course to accompany Course 2.
27. Analysis, including electroanalysis.
28. Chemical equilibrium between salts and their aqueous solutions.
29. Chemical equilibrium, including silicates.

## LABORATORY REGULATIONS

Each student proposing to attend lectures or practical work in the chemical laboratory must apply for a card which will have marked on it the number of his seat in the lecture room, of his working place in the laboratory and of his locker. These cards will be given only to students presenting their registration cards, and no working place in the laboratory will be allotted until a deposit of four dollars (for some classes five dollars) has been made. Each student will be held responsible for the seat, etc., allotted him, and no change may be made without permission. At the close of the Easter term this card must be presented for certificate of attendance.

Each student is provided with a suitable note-book in which to keep an account of the work done by him during the year. These books will be examined from time to time, and marks will be assigned. The student's standing in practical chemistry is based upon these marks, together with those assigned for the practical examinations of the term, and for written examinations on the work.

An account will be kept with each student; all apparatus broken or destroyed and all fines will be charged against his deposit, which must be renewed when exhausted.

The apparatus provided is intended for use in the laboratory only, and may not be removed from the building. At the close of the term's work it must be returned clean and dry.

## GEOLOGY AND PALÆONTOLOGY

A. P. COLEMAN, M.A., PH.D., D.Sc., LL.D., F.R.S.	Professor Emeritus.
W. A. PARKS, B.A., PH.D.	Professor of Geology.
E. S. MOORE, M.A., PH.D.	Professor of Economic Geology.
A. MACLEAN, B.A.	Associate Professor.
MISS M. A. FRITZ, M.A., PH.D.	Class Assistant.
I. W. JONES, B.A., B.Sc.	Class Assistant.
H. JOHNSON, B.Sc.	Research Assistant.
J. O. G. SANDERSON, M.Sc.	Research Assistant.

## PASS COURSES

1. (a) A course of fifty lectures and (b) fifty hours practical work, designed to cover the whole field in a general way (Teachers' Course). Works of reference: As in course No. 5.
2. Dynamic and Structural Geology. A shorter course for students of the Pass Course. Twenty-five lectures.
3. Palæontology. (a) A course of twenty-five lectures on Invertebrate and Vertebrate Palæontology; (b) a laboratory course of fifty hours.
4. Historical Geology. A course of fifty lectures and fifty hours laboratory work on historical geology and palæontology with special reference to Canada. Works of reference: As in Course No. 6.

## HONOUR COURSES

5. Elementary Geology and Physiography. A course of twenty-five lectures is given weekly throughout the session. Works of reference: SCOTT, *Introduction to Geology*; DAVIS, *Physical Geography*; COLEMAN AND PARKS, *Elementary Geology*.
6. Historical and Stratigraphical Geology and Palæontology. A course of fifty lectures is given throughout the session. Works of reference: SCOTT, *Introduction to Geology*; COLEMAN AND PARKS, *Elementary Geology*; GEIKIE, *Text-book of Geology*; PIRRSN AND SCHUCHERT, *Text-book of Geology*; GRABAU, *Text-book of Geology*.
7. Illustrative practical course to accompany No. 6. A course of thirty hours in the use of maps and sections, and the study of fossils typical of the different formations.
8. Dynamical and Structural Geology. A course of fifty lectures. Works of reference: GEIKIE, *Geology*; CHAMBERLIN AND SALISBURY, *Geology*; LEITH, *Structural Geology*.
9. Invertebrate Palæontology. A course of fifty lectures throughout the session. Works of reference: Eastman's translation of ZITTEL's *Text-book of Palæontology*; NICHOLSON, *Manual of Palæontology*; GRABAU, *North American Index Fossils*.

10. Invertebrate Palæontology. A laboratory course of seventy-five hours. Works of reference: As in course No. 9; Palæontological publications of the Geological Survey of Canada, and of the different State surveys; Bulletins and Monographs of the Geological Survey of the United States.

11. Drawing and Cartography. A practical course of fifty hours in the Faculty of Applied Science.

12. Precambrian Geology. A course of twenty-five hours throughout the session. Works of reference: VAN HISE AND LEITH, *Geology of the Lake Superior Region*; GEIKIE, *Text-book of Geology*; CHAMBERLIN AND SALISBURY, *Geology*, Vol. II; Reports of the Geological Survey of Canada and of the Ontario Department of Mines.

13. Glacial Geology and Physiography. A course of twenty-five lectures throughout the session. Works of reference: GEIKIE, *Great Ice Age*; COLEMAN, *Ice Ages Recent and Ancient*; SALISBURY, *Physiography*.

14. Geological Surveying and Cartography. A course of field work and practical work in drafting. Three hours per week throughout the year.

15. Economic Geology. A course of fifty lectures throughout the session. Works of reference: LINDGREN, *Mineral Deposits*; RIES, *Economic Geology*; EMMONS, *General Economic Geology*; MOORE, *Coal*; BECK, *The Nature of Ore Deposits*; SPURR, *Ore Magmas*; Reports of the Geological Survey of Canada and of the Ontario Department of Mines.

16. Practical Economic Geology. A course of fifty hours laboratory work to illustrate course No. 15.

17. Meteorology. A course of twenty-five lectures. Works of reference: DAVIS, *Elementary Meteorology*; HANN, *Klimatologie*.

18. Vertebrate Palæontology. A course of twenty-five lectures. Works of reference: WOODWARD, *Vertebrate Palæontology*; NICHOLSON AND LYDEKKE, *Manual of Palæontology*; ZITTELL, *Text-book of Palæontology*, Vol. II (translation by Eastman).

19. Stratigraphic Palæontology. A course of one hundred hours lectures and laboratory work. Works of reference: The publications in the Library of the Department, including various monographs on special subjects and the palæontological reports of the different states and societies.

20. Mining Geology. A course of twenty-five lectures on geological problems associated with mining, typical mining regions in Canada, the United States, and elsewhere being discussed from the geological side. Works of reference: SPURR, *Geology Applied to Mining*; and as in courses Nos. 12 and 15.

21. A course of twenty-five lectures on Economic Geology and Geography for students in the course of Commerce and Finance. Works of reference: LEITH, *Economic Aspects of Geology*; SPURR, *Political and Commercial Geology*; RIES, *Economic Geology*; EMMONS, *General Economic Geology*; MOORE, *Coal*.



22. Vertebrate Palæontology. A laboratory course of twenty-five hours.
23. Practical Precambrian and economic geology. Three hours per week, Easter term.
24. Economic geology of Canada. A course of twenty-five lectures.
25. Mining. An elementary course of one hour per week, Easter term.
26. Physiography and Climatology. A course of twenty-five lectures for students in the course of Commerce and Finance. Works of reference COLEMAN AND PARKS, *Elementary Geology*; SALISBURY, *Physiography Elementary Course*.

### MINERALOGY AND PETROGRAPHY

T. L. WALKER, M.A., Ph.D.....	Professor.
A. L. PARSONS, A.B.....	Associate Professor.
J. E. THOMSON, B.A.Sc.....	Assistant Professor.
D. KERR-LAWSON, B.A.....	Demonstrator.
H. C. RICEABY, M.A.....	Research Assistant.
W. GERRIE, B.A.....	Research Assistant.

For students in the Faculty of Arts of the University of Toronto the following courses of lectures and demonstrations have been arranged:

1. Elementary Mineralogy. A course of twenty-five lectures once a week throughout the year. Books of reference: DANA, *Text-book of Mineralogy*; ROGERS, *Study of Minerals and Rocks*.
2. A short practical course illustrative of the above, involving twenty hours' laboratory work. Books of reference: As for Course 1.
3. Morphological Crystallography. A course of twenty-five lectures once a week throughout the year. Book of reference: WALKER, *Crystallography*.
4. Blowpipe Analysis and Determinative Mineralogy. A laboratory course of three hours a week throughout the year (two hours a week for pass students). Books of reference: EAKLE, *Mineral Tables*; LEWIS, *Determinative Mineralogy*.
5. Determinative Mineralogy. A laboratory course in continuation of Course 4. Two hours a week. Book of reference: LEWIS, *Determinative Mineralogy*.
6. Physical Mineralogy. A course of fifty hours' lectures and laboratory work, introducing the student to optical and physical crystallography as a preparation for the study of microscopic petrography (seventy-five hours for pass students). Books of reference: DANA, *Text-book of Mineralogy*; WALKER, *Crystallography*.

7. Practical Crystallography, including goniometric measurements, crystal drawing, projection and calculation with experiments in physical mineralogy. One day a week during the Michaelmas term.

8. Systematic Mineralogy. A course of fifty hours' lectures and laboratory work, being a continuation of courses 1 and 2. Books of reference: DANA, *Text-book of Mineralogy*; EAKLE, *Mineral Tables*.

9. General Mineralogy. Twenty-five lectures on special subjects to be selected from year to year. Books of reference: KOBELL, *Geschichte der Mineralogie*; FOUQUÉ ET MICHEL-LÉVY, *Synthèse des Minéraux et des Roches*.

10. General Mineralogy. Practical course of seven hours a week throughout the year.

11. Petrography. One hour a week lectures and practical work throughout the session. Books of reference: KEMP, *Handbook of Rocks*; HARKER, *Petrology for students*.

12. Petrography. Two hours a week devoted to practical petrography, both macroscopic and microscopic. Books of reference: LUQUER, *Minerals in Rock Sections*; HARKER, *Petrology for Students*.

13. Assaying. Laboratory work in the different branches of the subject, occupying three hours a week throughout the session.

14. Advanced Petrography. Twenty-five lectures on the characteristics of the rock-forming minerals and on general petrography. Book of reference: IDDINGS, *Rock Minerals*.

15. Mineralography. Fifty hours laboratory work in the study of opaque minerals by microscopic methods in reflected light. Book of reference: DAVY AND FARNHAM, *Microscopic Examination of the Ore Minerals*.

16. A course in Mineral Analysis, seventy-five hours.

17. Metallurgy, an introductory course of twelve hours.

The work in Mineralogy is carried on in the Mineralogical Laboratories in the Mining Building.

## HOUSEHOLD SCIENCE

### MEMBERS OF THE FACULTY OF HOUSEHOLD SCIENCE

MISS A. L. LAIRD, M.S.	Professor.
MISS A. C. WILLARD, A.M., S.M., Ph.D.	Assistant Professor.
MISS E. M. McMILLAN, Ph.B.	Lecturer.
MISS C. F. VALENTINE, M.A.	Lecturer.
MISS H. LEWIS, B.S.	Instructor.
MISS E. W. PARK, M.A.	Instructor.
MISS M. COPUS, B.A.	Research Worker.

### PASS COURSES

1a. History of Home Life. A course of lectures one hour a week throughout the session.

3a. Textiles and Household Management. A course of two lectures and one laboratory period a week throughout the session.

4a. Foods and Food Values. A course of two lectures and one laboratory period a week throughout the session.

#### HONOUR COURSES

1b. Household Science. A course of lectures one hour a week throughout the session.

2a. Textiles and Household Management. A course of ten hours a week throughout the session. This includes (a) a study of textiles, (b) a study of metals, woods, etc., used in the home, and the principles underlying their care, (c) the house, (d) the home care of the sick.

3b. Foods and Food Values. A course of twelve hours a week throughout the session—lectures and laboratory work.

4b. Economics of the Household. A course of lectures and discussions two hours a week throughout the session. It includes the economics of spending, the division of the income, etc.

4c. Dietetics. A lecture course of two hours a week throughout the session and discussion periods, two hours a week.

4d. An advanced laboratory course of six hours a week throughout the session designed to illustrate the lectures in Course 4c. Each student also investigates a problem related to her work.

#### COURSES IN THE FACULTY OF HOUSEHOLD SCIENCE

1c. Art and Design in the Home. A course of lectures and laboratory work, two hours a week throughout the session.

2b. Household Science. A course of lectures and laboratory work throughout the session.

3c. Foods and Food Values. A course of nine hours a week throughout the session—lectures and laboratory work.

4e. Foods and Diet. Discussions and laboratory work, four hours a week.

4f. Textiles. An advanced course, eight hours a week.

4g. Dietetics. A course of lectures and laboratory work, nine hours a week.

#### COURSE IN THE DEPARTMENT OF PUBLIC HEALTH NURSING

5. A lecture course in nutrition and dietetics; family budgets are also discussed.

Occasional Work: Under certain conditions, occasional students may be admitted to Courses 3a and 4a.

Graduate Work: Opportunities are offered in the laboratories graduate students who desire to engage in research work.

Laboratory deposit fee: a deposit of three dollars (\$3.00) is required each student taking laboratory courses. This amount, minus the cost equipment and apparatus destroyed, will be returned at the end of t session.

Books of reference: FRIEDENWALD AND RUHRAB, *Diet in Health a Disease*; CARTER, HOWE AND MASON, *Nutrition and Clinical Dieteti*; SHERMAN, *Chemistry of Food and Nutrition*; LUSE, *Science of Nutritio*; FITCH, *Dietotherapy*; WHEELER AND WHEELER, *Dietetics and Dietotheraf*; GRULEE, *Infant Feeding*; HESS, *Principles and Practice of Infant Feedin*; SHERMAN AND SMITH, *The Vitamins*; BAILEY, *Source, Chemistry a: Use of Food Products*; SHERMAN, *Food Products*; TIBBLES, *Foods, the Origin, Composition and Manufacture*; LEACH, *Food Inspection a: Analysis*; WILEY, *Foods and Their Adulteration*; WELD, *Marketing Farm Products*; McKILLOP AND ATKINSON, *Economics, American Acaden of Political and Social Science, Cost of Living*; LEEDS, *The Household Budge*; ABEL, *Successful Family Life on a Moderate Income*; CAMPBELL, *Househo Economics*; RICHARDS, *Cost of Living, Cost of Shelter*; TINKLER A: MASTER, *Applied Chemistry*, Vol. I; SNELL, *Elementary Household Chemi try*; WOOLMAN AND MCGOWAN, *Textiles*; MCGOWAN AND WAITE, *Textile DOOLEY, Textiles*; DYER, *Textile Fabrics*; BALDERSTON, *Laundering*; MARS *Laundry Work*; BALDERSTON, *Housewifery*; CLARK, *The Care of a Hous*; VAN RENSSELAER, ROSE AND CANON, *Manual of Home Making*; AIKEN *Handbook of Practical Nursing*; MAXWELL AND POPE, *Practical Nursin*; DOW, *Composition (Art and Design)*; Government Bulletins; *Journal Biological Chemistry*, *Journal of Home Economics*.

## RELIGIOUS KNOWLEDGE

REV. W. R. R. ARMITAGE, M.A.	Wycliffe Colleg
REV. H. S. BELLISLE, M.A.	St. Michael's Colleg
W. T. BROWN, M.A., Ph.D.	Victoria Colleg
REV. F. H. COSGRAVE, M.A., B.D.	Trinity Colleg
REV. R. DAVIDSON, Ph.D.	Knox Colleg
REV. J. DOW, M.A.	Knox Colleg
REV. H. T. F. DUCKWORTH, M.A.	Trinity Colleg
REV. ALFRED GANDIER, M.A., D.D., LL.D.	Knox Colleg
REV. B. W. HORAN, M.A., B.D.	Wycliffe Colleg
REV. T. W. ISHERWOOD, M.A.	Wycliffe Colleg
REV. A. J. JOHNSTON, B.A., D.D.	Victoria Colleg
REV. J. F. McLAUGHLIN, B.A., D.D.	Victoria Colleg
REV. S. A. B. MERCER, M.A., D.D., Ph.D.	Trinity Colleg
REV. J. H. MICHAEL, M.A.	Victoria Colleg
REV. H. C. S. MORRIS, M.A.	Trinity Colleg

REV. T. R. O'MEARA, D.D., LL.D.....	Wycliffe College.
REV. C. VENN PILCHER, M.A., D.D.....	Wycliffe College.
REV. W. A. POTTER, M.A., B.D.....	Victoria College.
REV. D. M. RAMSAY, D.D.....	Knox College.
REV. W. J. ROACH, B.A.....	St. Michael's College.
REV. W. ROLLO, M.A.....	Trinity College.
REV. W. E. TAYLOR, M.A., PH.D.....	Wycliffe College.
REV. F. H. WALLACE, M.A., D.D.....	Victoria College.

Students desiring to take Religious Knowledge as a subject in any year should consult their College Registrar with regard to the courses open to them in the following schedules:

#### FIRST YEAR

- 1a. A first course in the English Bible. One hour.
- 1b. A first course in Natural and Revealed Religion. One hour.
- 1c. A first course in the language of the Greek New Testament. Three hours.
- 1d. Oriental Languages 1a, p. 231. One hour.

#### SECOND YEAR

- 2a. A second course in the English Bible. Two hours.
- 2b. A second course in Natural and Revealed Religion. Two hours.
- 2c. A second course in the language of the Greek New Testament. Not less than two hours.
- 2d. A course in Church History (Victoria). Two hours.
- 2e. Oriental Languages 2a, p. 231. Two hours.

#### THIRD YEAR

- 3a. A third course in the English Bible. Three hours.
- 3b. A third course in Natural and Revealed Religion. Three hours.
- 3c. A first course in the Literature and Language of Greek Testament. Three hours.
- 3d. A course in Church History. Three hours.
- 3e. A first course in the History and Philosophy of Religion. Three hours.
- 3f. Oriental Languages 3a, p. 231. Three hours.

#### FOURTH YEAR

- 4a. A fourth course in the English Bible. Three hours.
- 4b. A fourth course in Natural and Revealed Religion. Three hours.
- 4c. A second course in the Literature and Language of Greek Testament. Three hours.
- 4d. A course in Church History. Three hours.
- 4e. A second course in the History and Philosophy of Religion. Three hours.
- 4f. Oriental Languages 4a, p. 231. Three hours.

## ART AND ARCHAEOLOGY

C. T. CURRELLY, M.A. . . . . *Professor of the History of Industrial Art.*  
 Miss C. G. HARCUM, M.A., Ph.D. . . . *Assistant Professor of the History of  
 Industrial Art.*

Students of the Third and Fourth Years will attend the same lectures and will take either course 1 or course 2.

1. A course on the History of Art.
2. A course on the Development of the Mechanical Industries.

These courses are to be taken in alternate sessions.

3. The Private Life of the Romans. A study of the daily life of the Romans, including the family, the town and country house, education, meals, amusements, clothes, utensils, occupations, social and funeral customs. Lectures, reading, and observation in the Museum. One hour a week.

## MILITARY STUDIES

G. S. CARTWRIGHT, C.B., C.M.G., BRIG.-GEN. (late R.E.) . . . . . *Director.*

These courses are options in all Arts courses of the second, third and fourth years respectively. Students who have had some military training—C.E.F., Militia, or Cadet Corps—are admitted.

1. (*Juniors*) This course comprises elementary tactics, topography, musketry, organization and administration, and (in addition to these professional subjects) lectures on citizenship, the relations between the various parts of the Empire with regard to defence, trade-routes, coal and fuel stations, naval power, and the distribution of the Empire's armed forces.

2. (*Intermediate*) The professional subjects of course 1 are continued on a more advanced grade, with the addition of Military Hygiene and Military Geography.

In addition to the educative nature of the subjects considered in these two courses, they comprise the work necessary for C.O.T.C. certificate "A" which qualifies for substantive commissions as Lieutenants of Infantry. Candidates completing these and passing the examination prescribed by the Imperial Authorities for all O.T.Cs. in the Empire and conducted by the Militia Department are recommended for this certificate.

3. (*Seniors*) This course covers the work required for the higher certificate and involves the study of Organization, Administration, Strategy, and some portion of Military History. Those who complete this course successfully and have had defined military experience are recommended to the Militia Department as candidates for the certificate.

4. (*Special*) This course covers the work of courses 1 and 2 and is for students with *previous service in the O.T.C. or other Militia Unit* who are unable to attend courses 1 and 2.

5. (*Engineers*) For those already in possession of Certificate "A" who desire to qualify for commissions in the Engineer branch of the Militia. Students in the final years of the Faculty of Applied Science are eligible.

6. (*Medicals*) For students of the fifth and sixth years in Medicine with previous service in the O.T.C. or other militia unit who desire to be qualified for commissions in the Canadian Army Medical Corps on graduation.

For particulars of the C.O.T.C., in which the practical portion of these courses is done, see page 179.

## PRESCRIPTION FOR COURSES

The courses leading to the degree of Bachelor of Arts are

(a) THE PASS COURSE

(b) The following Honour Courses:—

CLASSICS	MATHEMATICS AND PHYSICS
GREEK AND HEBREW	PHYSICS AND CHEMISTRY
ORIENTAL LANGUAGES	PHYSICS
HEBREW AND ANCIENT HISTORY	BIOLOGY
FRENCH GREEK AND LATIN	PHYSIOLOGY AND BIOCHEMISTRY
MODERN LANGUAGES	BIOLOGICAL AND MEDICAL SCIENCE
ENGLISH AND HISTORY	CHEMISTRY
MODERN HISTORY	CHEMISTRY MINERALOGY AND
POLITICAL SCIENCE	GEOLOGY
PHILOSOPHY	GEOLOGY AND MINERALOGY
PHILOSOPHY (ENGLISH OR	SCIENCE (GENERAL)
HISTORY OPTION)	HOUSEHOLD SCIENCE
PSYCHOLOGY	HOUSEHOLD ECONOMICS
MATHEMATICS	

The requirements for each of these courses are detailed in the following schedules, where the numerals refer to the corresponding numbers of the courses on the pages indicated. The paging in the schedules which follow is that of the separate Arts Calendar; in each case add 139 to find the corresponding page in this calendar.

### PASS COURSE

#### FIRST YEAR

1. Except under special circumstances and on the recommendation of his College, a student of the First Year presenting Honour Matriculation certificates, may not claim exemption in more than two subjects, and so must attend lectures and write examinations in at least four subjects; all other students must take the six following subjects :

1. English 1a, 1b, pp. 95, 96	2 hours
2. Latin 1a, p. 89	4 "
3. Mathematics 1a, 1b, p. 128	2 "
4. One of Greek 1a or 1b, p. 87	4 "
Hebrew 1b, p. 92	4 "
German 1a, p. 98	4 "
French 1a, p. 101	4 "
Italian 1a or 1c, pp. 103, 104 or Spanish 1a or 1d, p. 105	4 "
5. One of Greek and Roman History 1, p. 91	1 "
Mathematics 1c, p. 129	1 "
Religious Knowledge 1a or 1b or 1c or 1d, p. 104	1 "
6. One of a second language from 4	4 "
General Science 1, pp. 142, 143 (see section 5, p. 169)	3 "



2. A student of Chinese or Japanese birth and education is permitted to substitute Chinese or Japanese respectively for Latin in the First and Second Years. For such a student a special curriculum in Chinese or Japanese will be prepared.

# SECOND, THIRD AND FOURTH YEARS

Five subjects are to be taken in each of the Second, Third and Fourth Years, to be selected as indicated below from the following list of subjects. A subject chosen in the Second Year must be continued throughout the Third and Fourth Years, except in those cases covered by special regulation, and the choice of subjects made in the Second Year cannot be varied except on joint action of the College and University authorities. Registration cannot be completed until the College has formally approved of the selection of subjects for each year.

In making a selection of subjects for the Second Year the student must keep in mind the regulations governing the subjects to be taken in the Third and Fourth Years, as those regulations may affect his selection for the Second Year.

He should also make certain that the time-table of the Pass Course (see pages 170, 171) provides for his selection of subjects without clashes in all three years.

## List of Subjects

<i>Group I</i>	<i>Group II</i>	<i>Group III</i>
<sup>1</sup> Greek	Mathematics I	<sup>1</sup> <sup>2</sup> English
<sup>1</sup> Latin	Mathematics II	<sup>1</sup> <sup>2</sup> <sup>7</sup> Greek and Roman History <i>or</i>
<sup>6</sup> Hebrew	Astronomy	<sup>1</sup> <sup>2</sup> <sup>7</sup> Ancient Oriental History <i>or</i>
<sup>1</sup> German	Physics	<sup>1</sup> <sup>2</sup> <sup>7</sup> Modern History
<sup>1</sup> French	Zoology	<sup>1</sup> <sup>2</sup> Political Economy
<sup>1</sup> Italian <i>or</i>	Botany	<sup>1</sup> Philosophy
<sup>1</sup> Spanish	<sup>8</sup> Chemistry	<sup>2</sup> Ethics
	<sup>8</sup> Food Chemistry	<sup>2</sup> History of Philosophy
	Geology and Mineralogy	Psychology
	<sup>4</sup> Household Science	<sup>1</sup> <sup>2</sup> Religious Knowledge <i>or</i> Military Studies
	<sup>6</sup> General Science	

The student's attention is directed to the regulations on the following page to which the index figures refer in the above schedule.

PASS COURSE TIME-TABLE

	MONDAY	TUESDAY	WEDNESDAY
9	1 Latin 2 German 3 Ethics 4 English	1 English 2 Latin 3 Hebrew, Rel. Know., Mil. Stud. 4 Ethics	1 Latin 2 Rel. Know., Mil. Stud. 3 Ethics 4 English
10	1 German 2†French 3 Latin 4 Latin	1 French 2 German 3 English 4 Math. I, Chem.	1 French 2 English 3 Phys., G. & M., H.S. 4 French
11	1 Mathematics 2 Zool., Bot., Math. II, Astronomy 3 G. & R., Anc. or., Mod. Hist. 4 Rel. Know., Mil. Stud.	1 Trig., Rel. Know. 2 Greek 3 Math. I, Chem. 4 Hist. Phil., Psychol.	1 Heb., Ital., Span. 2 Chem., Math. I 3 Economics 4 G. & R., Anc. or., Mod. Hist.
12	1 Science 2 Greek 3 Hist. Phil. 4 Math. II, Zool., Bot.	1 Science 2 G. & R., Anc. Or., Mod. Hist. 3 Math. II, Bot., Zool. 4 Greek, French	2 Psychol., Phys., G. & M. 3 G. & R., Anc. or., Mod. Hist. 4 Hebrew, Phys., G. & M., H.S.
2	1 French 2†Chemistry, †Astronomy 3†Phys., †G. & M., †H.S. 4 Economics	1 Greek 2 Psychol., †Phys., †G. & M. 3 Ital., Span. 4 Ital., Span.	1 Greek 2†Zool., †Bot. 3 French 4 German
3	1 Greek 2†Chemistry, †Astronomy 3†Phys., †G. & M., †H.S. 4 Psychol.	1 Heb., Ital., Span. 2†Phys., †G. & M. 3 Economics 4†Zool., †Bot.	2†Zool., †Bot. 3 German 4†Phys., †G. & M., †H.S.
4	1 Economics 2 Philosophy, Psychol.	2 Economics 4†Zool., †Bot.	2 Heb., Ital., Span. 3 Greek 4†Phys., †H.S.

The third and fourth year hours of instruction in the Sciences are subject to change of which due notice will be given to the students concerned.

†Hours reserved for Scientific French.

PASS COURSE TIME-TABLE

	THURSDAY	FRIDAY	SATURDAY
9	1 English 2 Latin, G. & M 3 Ethics  4 Rel. Know., Mil. Stud.	1 Latin 2 Greek 3 Rel. Know.  4 English	2 Rel. Know., Mil. Stud. 3 English  4 French
10	1 Greek 2†French 3 English 4 G. & R., Anc. or., Mod. Hist.	1 German 2 Latin 3 French 4 Ethics	1 Latin 2 English 3 Greek, French 4 German
11	1 Heb., Ital., Span. 2 Chem., Math. I  3 Phys., G. & M., H.S. 4 Math. II, Zool., Bot.	1 Mathematics 2 French  3 Latin 4 Latin, Math. I., Chem.	1 French 2 Heb., Ital., Span.  3 German 4 Hebrew, Phys., G. & M., H.S.
12	1 Anc. History 2 Zool., Bot., Math. II, Astronomy 3 Hist. Phil., Zool., Bot., Math. II 4 Ital., Span.	1 Science 2 Phys.  3 Math. I, Chem. 4 Hist. Phil., Psychol.	1 German 2 G. & R., Anc. or., Mod. Hist. 3 Hebrew, Mil. Stud.
2	1 German 2 Economics 3†Chemistry 4†Chemistry	1 Heb., Ital., Span. 2 German 3 Ital., Span., Heb. 4 Economics	
3	1 Economics 2 Heb., Ital., Span. 3†Chemistry 4†Chemistry	2 Philosophy, Psychol. 3†Zool., †Bot., †Psychol.* 4 Greek	
4	2 G. & R., Anc. or. Mod. Hist. 3 Psychol.	2 Psychol.  3†Zool., †Bot., †Psychol.*	

\*An alternate laboratory course may be arranged other days for students unable to attend this course.

†Laboratory periods.

Course	Prescription of Courses				Hours
	Second Year	Third Year	Fourth Year	Hours	
Greek	2a or 2b, p. 87	3a, p. 87	4a, p. 87	3	3
Latin	2a, p. 89	3a, p. 89	4a, p. 89	3	3
Hebrew	2b, p. 92	3b, p. 92	4b, p. 92	3	3
English	2a, 2b, p. 96	3a, 3b, p. 96	4a, 4b, p. 96	3	3
German	2a, p. 98	3a, p. 99	4a, p. 99	3	3
French	2a, p. 101	3a, p. 101	4a, pp. 101, 102	3	3
Italian	2a or 2b, p. 104	3a or 3c, p. 104	4a or 4c, p. 104	3	3
Spanish	2a or 2b, p. 105	3a or 3d, p. 105	4a or 4d, pp. 105, 106	3	3
Greek and Roman History	2a, p. 91	3a, p. 91	4a, p. 91	3	3
Ancient Oriental History	2a, p. 94	3a, p. 94	4a, p. 94	3	3
Modern History	2a, 2b, p. 106	3a, 3b, p. 106	4a, 4b, 4c, p. 107	3	3
Political Economy	2c, p. 114	3c, p. 115	4c, p. 117	3	3
Philosophy	2a, p. 121 or 12e, p. 124	3a, p. 121 or 13h, p. 124	4a, p. 121 or 14i, p. 124	3	3
Psychology	2a, p. 127	3b, p. 121 or 13f or 3g, p. 124	4b, p. 122 or 14g or 4h, p. 124	3	3
Mathematics I	2a, 2b, p. 129	3a, p. 129	4a, 4b, p. 129	3	3
Mathematics II	Act. Sc. 1a, p. 132	Mech. 3a, p. 132	Act. Sc. 2a, p. 132	4	4
Astronomy	1, p. 133	3a, p. 133	4a, p. 133	4	4
Physics	9, pp. 135, 136	4, 10, p. 136	11, p. 136	4	4
Zoology	2, p. 143	3, p. 143	4, p. 143	4	4
Botany	2, p. 147	3, p. 147	4, p. 148	4	4
Chemistry	1, 14, pp. 156, 157	3, 18, pp. 156, 157	2, 26, pp. 156, 157	4	4
Geology and Mineralogy	Mineral. 1, 4, 11, pp. 160, 161	3, p. 156, Food Chem. 5, p. 154	Food Chem. 6, p. 154	4	4
Household Science	1, pp. 142, 143	Geol. 2, 3, p. 158	Geol. 13, 4, pp. 158, 159	4	4
General Science	one of 2a, 2b, 2c, 2d, 2e, p. 164	Geol. 2, p. 158, Min. 6, p. 160	Geol. 13, 15, 16, p. 159	4	4
Religious Knowledge	1, p. 165	3a, p. 162	4a, p. 162	4	4
Military Studies		one of 3a, 3b, 3c, 3d, 3e, 3f, [p. 164]	one of 4a, 4b, 4c, 4d, 4e, 4f, [p. 164]	3	3
†St. Michael's College.		2, p. 165	3, p. 165	3	3

*Selection of Subjects**Second Year*

*Group I*—One or two subjects.

*Group II*—Not more than two subjects; if no subject, or General Science only, is chosen from this group, two subjects must be chosen from Group I, one of which must be Latin or Greek or Hebrew.

*Group III*—Not more than three subjects.

*Third and Fourth Years*

*Group I*—Not more than two subjects; if two are chosen, English and Religious Knowledge 3c or 4c may not both be chosen from Group III.

*Group II*—Not more than two subjects.

*Group III*—Not more than four subjects.

A student desiring a selection not provided for in the above schedule must obtain the consent of the College and University authorities for such selection.

*Sequence of Subjects*

A subject chosen in the Second Year must be continued throughout the Third and Fourth Years except in those cases covered by the following regulations. The subject or subjects affected by each regulation are indicated in the list of subjects on the previous page by the index figure corresponding to the regulation.

1. This subject may be taken in the Second Year without obligation to continue it in the Third and Fourth Years.

2. This subject may be begun in the Third Year, but if chosen then must be continued in the Fourth Year.

3. This subject may be taken in either the Third or the Fourth Year without having been taken in the previous year.

4. Household Science is begun in the Third Year and if chosen must be taken in the Fourth Year, the student who desires to take this subject must take Chemistry in the Second Year and Food Chemistry in the Third and Fourth Years.

5. If General Science is not taken in the First Year it must be taken in the Second Year, or another subject of Group II substituted for it, and this subject must be continued in the Third and Fourth Years.

6. Hebrew may be taken in the First and Second Years without obligation to continue it in the Third and Fourth Years; with the consent of the College and University authorities a student who has not previously taken Hebrew may begin this subject in the Second or Third Year, provided he continues it throughout the remainder of the course.

7. With the consent of the College two of these three subjects may be taken, provided that a timetable may be arranged by the Departments concerned without interfering with the hours now assigned to Modern History.

8. Food Chemistry may be taken only in the Third and Fourth Years and as an alternative to Chemistry in those years.

## CLASSICS

## ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in Classics must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an equivalent examination in the following five subjects—Greek; Latin; Mathematics (Algebra and Geometry); together with two additional subjects, one of which should be French or German.

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

## FIRST YEAR

English 1a, 1b, pp. 95, 96	2 hours
One of German 1a, p. 98	4 "
French 1a, p. 101	4 "
One of Mathematics 1c, p. 129	1 "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
(Candidates who are exempt from Science or German as a Pass subject of the First Year may offer this subject in lieu of Religious Knowledge.)	
*Greek 1c, p. 88	5 hours
*Latin 1b, p. 90	4½ "
*Greek and Roman History 1, p. 91	1 "

## SECOND YEAR

One of English 2a, 2b, p. 96	2 hours
German 2a, p. 98	3 "
French 2a, p. 101	3 "
One of English 2a, 2b, p. 96 (if not already chosen)	2 "
History 2a, p. 106	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Greek 2c, p. 88	5 "
*Latin 2b, p. 90	5½ "
*Greek and Roman History 2b, p. 91	2 "

## THIRD YEAR

One of Greek 3h, p. 88 and Latin 3f, p. 90	1 hour
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 hours
Military Studies 2, p. 165	3 "
*Greek 3b, p. 88	7 "
*Latin 3b, p. 90	6 "
*Greek and Roman History 3b, 3c, p. 91	1 "

\*Honours.

FOURTH YEAR

One of Greek 4h, p. 89 and Latin 4e, p. 91	1 hour
Latin 4f, p. 91	2 hours
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*Greek 4b, p. 89	7 "
*Latin 4b, p. 90	5 "
*Greek and Roman History 4b, 4c, 4d, p. 91	2 "

GREEK AND HEBREW

ENTRANCE CONDITIONS

Every student applying to enter the Honour Course in Greek and Hebrew at the beginning of the Second Year, must obtain at the examination of the First Year in the Pass course, an average of at least 60 per cent. in the subjects which he is required to take, with not less than 66 per cent. in Greek and Hebrew.

Candidates may begin the study of Greek in the First Year under the beginner's course Greek 1b, 2b.

FIRST YEAR

English 1a, 1b, pp. 95, 96	2 hours
Latin 1a, p. 89	4 "
Mathematics 1a, 1b, p. 128	2 "
Greek 1a or 1b, p. 87	4 "
Oriental Languages 1b, p. 92	4 "
One of Greek and Roman History 1, p. 91	1 "
Mathematics 1c, p. 129	1 "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "

Attention is drawn to Section 1, page 167, which applies also to the First Year of this course.

SECOND YEAR

Greek and Roman History 2a, p. 91	2 hours
One of Latin 2a, p. 89	3 "
English 2a, 2b, p. 96	2 "
German 2a, p. 98	3 "
French 2a, p. 101	3 "
History 2a, p. 106	2 "
Philosophy 2a, p. 121 or †2e, p. 124	3 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
‡Greek 2a or 2b, 2f, pp. 87, 88	4 "
*Oriental Languages 2c, 2d, p. 93	5 "
*Ancient Oriental History 2c, p. 94	1 "

†St. Michael's College.

\*Honours.

‡Not less than 66% must be obtained in Greek.

## THIRD YEAR

Greek and Roman History 3a, p. 91	3 hours
One of English 3a, 3b, p. 96	3 "
Philosophy 3a, p. 121 or †3h, p. 124	3 "
Philosophy 3b, p. 121 or †3f or 3g, p. 124	3 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*Greek 3e, 3g, p. 88	5 "
*Oriental Languages 3c, 3d, 3f, p. 93	6 "
*Ancient Oriental History 3c, p. 94	1 "

## FOURTH YEAR

Greek and Roman History 4a, p. 91	3 hours
One of English 4a, 4b, p. 96	3 "
Philosophy 4a, p. 122 or †4i, p. 124	3 "
Philosophy 4b, p. 122 or †4g or 4h, p. 124	3 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*Greek 4e, 4g, p. 89	5 "
*Oriental Languages 4c, 4d, 4f, p. 93	5 "
*Ancient Oriental History 4c, p. 94	1 "

## ORIENTAL LANGUAGES

## ENTRANCE CONDITIONS

Every student applying to enter the Honour Course in Oriental Languages at the beginning of the Second Year, must obtain at the examination of the First Year in the Pass Course an average of at least 60 per cent. in the subjects which he is required to take, with not less than 66 per cent. in Hebrew. It is recommended that the optional language be either Greek or German.

## FIRST YEAR

English 1a, 1b, pp. 95, 96	2 hours
Latin 1a, p. 89	4 "
Mathematics 1a, 1b, p. 128	2 "
Oriental Languages 1b, p. 92	4 "
One of Greek and Roman History 1, p. 91	1 "
Mathematics 1c, p. 129	1 "
‡Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "

†*St. Michael's College.*

\**Honours.*



FIRST YEAR—*Continued*

One of Greek 1a or 1b, p. 87	4 hours
German 1a, p. 98	4 "
French 1a, p. 101	4 "
General Science 1, pp. 142, 143	3 "

Attention is drawn to Section 1, page 167, which applies also to the First Year of this course.

SECOND YEAR

English 2a, 2b, p. 96	2 hours
One of Greek 2a or 2b, p. 87	3 "
Latin 2a, p. 89	3 "
Greek and Roman History 2a, p. 91	2 "
German 2a, p. 98	3 "
French 2a, p. 101	3 "
History 2a, p. 106	2 "
Philosophy 2a, p. 121 or †2e, p. 124	3 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Oriental Languages 2c, 2d, 2e, 2f, p. 93	9 "
*Ancient Oriental History 2c, p. 94	1 "

THIRD YEAR

Two of Greek 3a, p. 87 or 3g, p. 88	3 hours
Latin 3a, p. 89	3 "
Greek and Roman History 3a, p. 91	3 "
English 3a, 3b, p. 96	3 "
German 3a, p. 99	3 "
French 3a, p. 101	3 "
History 3a or 3b, p. 106	2 "
Philosophy 3a, p. 121 or †3h, p. 124; or	3 "
Philosophy 3b, p. 121 or †3f or 3g, p. 124	3 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*Oriental Languages 3c, 3d, 3e, 3f, p. 93	8 "
*Oriental Languages, one of 3g, 3h, 3i, p. 93	2 "
*Ancient Oriental History 3c, p. 94	1 "

§Students in this Course, who have not taken Greek previously, and who do not take Greek 1b, 2b, etc., are advised to take Religious Knowledge 1c, and the similar courses in the subsequent years.

†*St. Michael's College.*

\**Honours.*

## FOURTH YEAR

Two of Greek 4a, p. 87 <i>or</i> 4g, p. 89	3 hours
Latin 4a, p. 89	3 "
Greek and Roman History 4a, p. 91	3 "
English 4a, 4b, p. 96	3 "
German 4a, p. 99	3 "
French 4a, pp. 101, 102	3 "
History 4a <i>or</i> 4b <i>or</i> 4c, p. 107	2 "
Philosophy 4a, p. 122 <i>or</i> †4i, p. 124; <i>or</i>	3 "
Philosophy 4b, p. 122 <i>or</i> †4g <i>or</i> 4h, p. 124	3 "
Religious Knowledge 4a <i>or</i> 4b <i>or</i> 4c <i>or</i> 4d <i>or</i> 4e <i>or</i> 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*Oriental Languages 4c, 4d, 4e, 4f, p. 93	6 "
‡*Oriental Languages, one of 4g, 4h, 4i, p. 93	2 "
*Ancient Oriental History 4c, p. 94	1 "

‡Students must continue the course selected in the Third Year.

Every candidate in this course shall, during the Fourth Year, present a dissertation on some subject connected with Oriental Languages or Literature, such subject to be previously approved by his instructors in the department. The essay will, on or before the 1st of April in each year, be laid before the instructors in Oriental Languages in University College, Victoria College and Trinity College, who will examine it and assign to it marks according to their judgment of its merit. Such marks will be reported to the Registrar and be taken into account by the examiners in determining the standing of the candidate at the examination of the Fourth Year.

## HEBREW AND ANCIENT HISTORY

## ENTRANCE CONDITIONS

Every student applying to enter the Honour Course in Hebrew and Ancient History at the beginning of the Second Year, must obtain at the examination of the First Year in the Pass Course an average of at least 60 per cent. in the subjects which he is required to take, with not less than 66 per cent. in Hebrew. It is recommended that the student elect either Greek or German or both.

†*St. Michael's College.*

\**Honours.*

FIRST YEAR

English 1a, 1b, pp. 95, 96	2 hours
Latin 1a, p. 89	4 "
Mathematics 1a, 1b, p. 128	2 "
Oriental Languages 1b, p. 92	4 "
One of Greek and Roman History 1, p. 91	1 "
Mathematics 1c, p. 129	1 "
§Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
One of Greek 1a or 1b, p. 87	4 "
German 1a, p. 98	4 "
French 1a, p. 101	4 "
General Science 1, pp. 142, 143	3 "

Attention is drawn to Section 1, page 167, which applies also to the First Year of this course.

SECOND YEAR

Two of Greek 2a or 2b, p. 87	3 hours
Latin 2a, p. 89	3 "
English 2a, 2b, p. 96	2 "
German 2a, p. 98	3 "
French 2a, p. 101	3 "
History 2a, p. 106	2 "
Philosophy 2a, p. 121 or †2e, p. 124	3 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Greek and Roman History 2a, p. 91	2 "
*Oriental Languages 2c, 2d, p. 93	5 "
*Ancient Oriental History 2b, p. 94	3 "

THIRD YEAR

Two of Greek 3a, p. 87	3 hours
Latin 3a, p. 89	3 "
English 3a, 3b, p. 96	2 "
German 3a, p. 99	3 "
French 3a, p. 101	3 "
History 3a or 3b, p. 106	2 "
Philosophy 3a, p. 121 or †3h, p. 124	3 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*Greek and Roman History 3a, p. 91	3 "
*Oriental Languages 3c, 3d, 3f, p. 93	6 "
*Ancient Oriental History 3b, p. 94	3 "

§Students in this Course, who have not taken Greek previously, and who do not take Greek 1b, 2b, etc., are advised to take Religious Knowledge 1c, and the similar Courses in the subsequent years.

†*St. Michael's College.*

\**Honours.*

## FOURTH YEAR

Two of Greek 4a, p. 87	3 hours
Latin 4a, p. 89	3 "
English 4a, 4b, p. 96	2 "
German 4a, p. 99	3 "
French 4a, pp. 101, 102	3 "
History 4a or 4b or 4c, p. 107	2 "
Philosophy 4a, p. 122 or 4d, p. 124	3 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies, 3, p. 165	3 "
*Greek and Roman History 4a, p. 91	3 "
*Oriental Languages 4c, 4d, 4f, p. 93	5 "
*Ancient Oriental History 4b, p. 94	3 "

## FRENCH, GREEK AND LATIN

## ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in French Greek and Latin, must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an equivalent examination in the following five subjects—Latin; Mathematics (Algebra and Geometry); two of Greek, English, French; together with an additional subject.

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

In each year of the Course, French, Greek and Latin are to be taken, two as honour subjects, the third as a pass subject. Candidates taking Greek as their pass subject, may begin the study of Greek in their First Year under the beginner's course, Greek 1b, 2b.

## FIRST YEAR

One of Mathematics 1c, p. 129	1 hour
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
(Candidates who are exempt from Science or German as a Pass subject of the First Year may offer this subject in lieu of Religious Knowledge.)	
One of Greek 1a or 1b, p. 87	4 hours
Latin 1a, p. 89	4 "
French 1a, p. 101	4 "
Two of *Greek 1e, p. 88	5 "
*Latin 1d, p. 90	5 "
*French 1f, 1g, 1h, p. 102	5½ "
*English 1a, 1d, pp. 96, 97	2 "
*Greek and Roman History 1, p. 91	1 "
*Honours.	

SECOND YEAR

One of English 2a, 2b, p. 96	2 hours
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
One of Greek 2a or 2b, p. 87	3 "
Latin 2a, p. 89	3 "
French 2a, p. 101	3 "
Two of *Greek 2e, p. 88	4½"
*Latin 2d, p. 90	4½"
*French 2f, 2g, 2h, pp. 102, 103	4 "
One of *Greek and Roman History 2b, p. 91	1 "
*Phonetics, p. 106	1 "

THIRD YEAR

One of English 3b, p. 96	3 hours
French 3f, p. 103	2 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
One of Greek 3a, p. 87	3 "
Latin 3a, p. 89	3 "
French 3a, p. 101	3 "
Two of *Greek 3f, p. 88	6 "
*Latin 3e, p. 90	5 "
*French 3c, 3d, 3e, p. 103	5 "

FOURTH YEAR

One of English 4b, p. 96	3 hours
French, 4g, p. 103	2 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
One of Greek 4a, p. 87	3 "
Latin 4a, p. 89	3 "
French 4a, pp. 101, 102	3 "
Two of *Greek 4f, p. 89	6 "
*Latin, 4d, p. 91	5 "
*French 4c, 4d, 4e, 4f, p. 103	5 "

\*Honours.

## MODERN LANGUAGES

## ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in Modern Languages must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an equivalent examination in the following five subjects—Latin; Mathematics (Algebra and Geometry); two of German, French, Italian, Spanish; together with an additional subject.

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

## FIRST YEAR

One of Mathematics 1c, p. 120	1 hour
General Science 1, pp. 142, 143	3 hours
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
Three of *English 1a, 1c, 1d, pp. 96, 97	3 "
*German 1c, 1d, 1e, 1h, p. 99	5½"
*French 1f, 1g, 1h, p. 102	5½"
*Italian 1a or 1c, 1b, p. 103, 104	5 "
*Spanish 1a or 1d, 1b, p. 105	5 "

Note—Not more than one new language may be begun in this First Year.

Dispensation from attendance at lectures and examinations of the Second or the Third Year of this course may be granted on application to students who agree to spend at least eight months of that year in study in one or both of the two foreign countries whose language and literature they choose as Honour subjects of their course.

## SECOND YEAR

One of Philosophy 2a, p. 121 or †2c, p. 124	3 hours
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
Three of *English 2a, 2b, 2c, p. 97	4 "
*German 2c, 2d, 2e, p. 99	4 "
*French 2f, 2g, 2h, pp. 102, 103	4 "
*Italian 2a or 2b, p. 104	3 "
*Spanish 2a or 2b, p. 105	3 "
*Phonetics, p. 106	1 "

†*St. Michael's College.*

\**Honours.*

THIRD YEAR

§One of English 3a, 3b, p. 96	3 hours
German 3e, p. 99	2 "
French 3f, p. 103	2 "
Italian 3c, p. 104	2 "
Spanish 3c, p. 105	2 "
Philosophy 3b, p. 121 or †3f or 3g, p. 124	3 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
Two of *English 3a, 3c, 3d, 3e, p. 97	7 "
*German 3b, 3c, 3d, p. 99	5 "
*French 3c, 3d, 3e, p. 103	5 "
*Italian 3a and 3b, or 3c, p. 104	5 "
*Spanish 3a and 3b, or 3d, p. 105	5 "

FOURTH YEAR

§One of English 4a, 4b, p. 96	3 hours
German 4g, p. 100	2 "
French 4g, p. 103	2 "
Italian 4c, p. 104	2 "
Spanish 4c, p. 106	2 "
Philosophy 4b, p. 122 or †4g or 4h, p. 124	3 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 166	3 "
Two of *English 4a, 4c or 4d, 4e, 4f, pp. 97, 98	7 "
*German 4b, 4c, 4d, 4e, p. 100	5 "
*French 4c, 4d, 4e, 4f, p. 103	5 "
*Italian 4a and 4b, or 4e, p. 104	5 "
*Spanish 4a and 4b, or 4d, pp. 105, 106	5 "

§Students in the *Third Year* selecting German 3e or French 3f or Italian 3c or Spanish 3c, and students in the *Fourth Year* selecting German 4g or French 4g or Italian 4c or Spanish 4c, must choose one of the languages in which they are taking honours. In the Third and Fourth years, only students taking honour subjects other than English may choose English as a pass subject.

ENGLISH AND HISTORY

ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in English and History must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an equivalent examination in the following five subjects—Latin; Mathematics (Algebra and Geometry); two of Greek, English, French, German; together with an additional subject.

†*St. Michael's College.*

\**Honours.*

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

## FIRST YEAR

One of Mathematics 1c, p. 129	1 hour
General Science 1, pp. 142, 143	3 hours
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
(Candidates who have qualified for entrance into this course by obtaining Honour Matriculation standing in three foreign languages may offer one of these languages in lieu of Religious Knowledge.)	
*Latin 1c, p. 90	4 hours
*English 1a, 1c, 1d, pp. 96, 97	3 "
*History 1a, p. 107	2 "
*Greek and Roman History 1, p. 91	1 "
One of *Greek 1d, p. 88	4 "
*German 1c, 1d, 1e, p. 99	5 "
*French 1f, 1h, p. 102	5 "

## SECOND YEAR

One of Political Economy 2d, p. 113	1 hour
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 hours
Military Studies 1, p. 165	2 "
*Latin 2c, p. 90	3 "
*English 2a, 2b, 2c, p. 97	4 "
*History 2d, 2e, p. 108	3 "
One of *Greek 2d, p. 88	4 "
*German 2c, 2e, p. 99	3 "
*French 2f, 2g, pp. 102, 103	3 "

## THIRD YEAR

One of English 3f, p. 97	2 hours
Philosophy 3b, p. 121 or †3f or 3g, p. 124	3 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*English 3a, 3c, 3d, 3e, p. 97	7 "
*History 3d, pp. 109, 110	1 "
One of *History 3c, p. 109	2 "
*Greek 3d, p. 88 and *History 3f, p. 110	2 "
*Latin 3d, p. 90 and *History 3f, p. 110	2 "

†*St. Michael's College.*

\**Honours.*



FOURTH YEAR

One of English 4g, p. 98	2 hours
Philosophy 4b, p. 122 or †4g or 4h, p. 124	3 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*Greek 4c, p. 89 (Aristotle's Poetics, in English)	1 "
*English 4a, 4d, 4e, 4f, pp. 97, 98	7 "
*History 4e, p. 111	1 "
One of *English 4c, p. 97	2 "
*History 4d, pp. 110, 111	2 "
*Greek 4d, p. 89 and *Political Economy 4e, p. 116	2 "
*Latin 4c, p. 91 and *Political Economy 4e, p. 116	2 "

MODERN HISTORY

ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in Modern History must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an equivalent examination in the following five subjects—Latin; Mathematics (Algebra and Geometry); History; French or German; together with an additional subject.

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

A student who has obtained complete standing at the examination of the First Year in the Pass Course with an average of 66 per cent. in at least four subjects, may enter the Second Year of the Honour Course in Modern History.

The entrance conditions and the First Year Course in Modern History are the same as those required for the Political Science Course. A student may thus choose at the end of his First Year whether he will proceed in the Modern History Course or in the Political Science Course.

Students should consult the staff of the department before selecting their options in the First Year. An adviser of studies will be present in Baldwin House from 10 a.m. to 4 p.m. from September 23rd to the close of registration.

FIRST YEAR

One of Greek and Roman History 1, p. 91	2 hours
Mathematics 11, p. 130	2 "
One of Anthropology 1a, p. 119	1½ "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
*English 1a, 1d, pp. 96, 97	2 "

†*St. Michael's College.*

\**Honours.*

## FIRST YEAR—Continued

One of *Latin 1c, p. 90	4 hours
*German 1c, 1d, p. 99	4 "
*French 1f, p. 102	4 "
*Italian 1c, p. 104	3 "
*Spanish 1d, p. 105	3 "
*History 1a, 1b, pp. 107, 108	4 "
*Political Economy 1b, p. 113	2 "

## SECOND YEAR

One of History 2h p.109	2 hours
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 104	2 "
Military Studies 1, p. 165	2 "
*English 2a, 2b, 2c, p. 97	4 "
*History 2c or 2d, 2e, 2f, pp. 108, 109	5 "
*Political Economy 2a, p. 113	3 "

## THIRD YEAR

One of English 3a, 3b, p. 96	3 hours
Philosophy 3b, p. 121 or †3f or 3g, p. 124	3 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*History 3c, 3d, 3e, 3f, pp. 109, 110	7 "
*Political Economy 2b, p. 113	3 "
One of *English 3d, p. 97	2 "
*History 3g, p. 110	2 "

## FOURTH YEAR

One of English 4a, 4b, p. 96	3 hours
Philosophy 4b, p. 122 or †4g or 4h, p. 124	3 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*History 4d, 4e, 4f, 4g, pp. 110, 111	5 "
One of *English 4d, p. 97	2 "
*History 4h, p. 111	2 "
*Political Economy 4e, p. 116	3 "

## POLITICAL SCIENCE

## ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in Political Science must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an equivalent examination in the following five subjects—Latin; Mathematics (Algebra and Geometry); History; French or German; together with an additional subject.

†*St. Michael's College.*

\**Honours.*

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

A student who has obtained complete standing at the examination of the First Year in the Pass Course with an average of 66 per cent. in at least four subjects, may enter the Second Year of this Honour Course.

The entrance conditions and the First Year course in Political Science are the same as those required for the Modern History course. A student may thus choose at the end of his First Year whether he will proceed in the Political Science course or in the Modern History course.

Students should consult the staff of the department before selecting their options in the First Year. An adviser of studies will be present in Baldwin House from 10 a.m. to 4 p.m. from September 23rd to the close of registration.

## FIRST YEAR

One of Greek and Roman History 1, p. 91	2 hours
Mathematics 11, p. 130	2 "
One of Anthropology 1a, p. 119	1½ "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
*English 1a, 1d, pp. 96, 97	2 "
One of *Latin 1c, p. 90	4 "
*German 1c, 1d, p. 99	4 "
*French 1f, p. 102	4 "
*Italian 1c, p. 104	3 "
*Spanish 1d, p. 105	3 "
*History 1a, 1b, pp. 107, 108	4 "
*Political Economy 1b, p. 113	2 "

## SECOND YEAR

One of Philosophy 2a, p. 121 or †2e, p. 124	3 hours
Mathematics 2g, p. 130	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
*History 2g, p. 109	2 "
*Political Economy 2a, 2b, 2c, p. 113	9 "

## DIVISION I—THIRD YEAR—ECONOMICS

One of Philosophy 3a, p. 121 or †3h, p. 124	3 hours
Philosophy 3c, pp. 121, 122	3 "
Mathematics, 3c, p. 129	3 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
*Political Economy 3a, 3b, 3c, 3d, pp. 114, 115	10 "

†*St. Michael's College.*

\**Honours.*

## DIVISION I—FOURTH YEAR—ECONOMICS

One of Philosophy 4a, p. 122 <i>or</i> †4i, p. 124	3 hours
Psychology 4b, p. 127	2 "
Mathematics, 4d, p. 129	3 "
Religious Knowledge 4a <i>or</i> 4b <i>or</i> 4c <i>or</i> 4d <i>or</i> 4e <i>or</i> 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*Political Economy 4a, 4d, 4e, pp. 115, 116	8 "
Two of *Political Economy 4b, pp. 115, 116; 4c, p. 116; 4f, p. 116; 4j, p. 117	4 "

## DIVISION II—THIRD YEAR—POLITICS AND LAW

One of Philosophy 3a <i>or</i> 3c, pp. 121, 122 <i>or</i> †3h, p. 124	3 hours
History 3a, p. 106	3 "
Religious Knowledge 3a <i>or</i> 3b <i>or</i> 3c <i>or</i> 3d <i>or</i> 3e <i>or</i> 3f, p. 164	3 "
*History 4f, p. 111	1 "
*Political Economy 3a <i>or</i> 3d, 3f, pp. 114, 115	4 "
*Law 3a, 3b, 3c, 3d, pp. 117, 118	7 "

## DIVISION II—FOURTH YEAR—POLITICS AND LAW

One of Philosophy 4a, p. 122 <i>or</i> †4i, p. 124	3 hours
Psychology 4b, p. 127	2 "
Mathematics 4d, p. 129	3 "
Religious Knowledge 4a <i>or</i> 4b <i>or</i> 4c <i>or</i> 4d <i>or</i> 4e <i>or</i> 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*History 4f, p. 111	1 "
*Political Economy 4e, 4b <i>or</i> 4c <i>or</i> 4f, pp. 115, 116	5 "
*Law 4a, 4b, 4c, 4d, p. 118	6 "

## DIVISION II—FOURTH YEAR—POLITICS AND LAW

(Available 1928-1929)

One of Philosophy 4b, p. 122 <i>or</i> †4g <i>or</i> 4h, p. 124	3 hours
Psychology 4b, p. 127	2 "
History 4a, p. 107	3 "
Religious Knowledge 4a <i>or</i> 4b <i>or</i> 4c <i>or</i> 4d <i>or</i> 4e <i>or</i> 4f, p. 164	3 "
*Political Economy 4e, 4b <i>or</i> 4c <i>or</i> 4f, pp. 115, 116, and 4k, p. 117	6 "
*Law 4a, 4b, 4c, 4d, p. 118	6 "

## PHILOSOPHY

## ENTRANCE CONDITIONS

A candidate for admission to the First Year of the<sup>†</sup> Honour Course in Philosophy must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an equivalent examination in the following five subjects—Latin; English; Mathematics (Algebra and Geometry); one of History, Greek, French, German, Physics; together with an additional subject.

†*St. Michael's College.*

\**Honours.*

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance requirements, must do so at the examination of the First Year. See Sections 34-36, p. 19.

A student who has obtained complete standing at the examination in the First Year in the Pass Course with an average of 60 per cent. in at least four subjects may enter the Second Year of the Honour Course of Philosophy.

FIRST YEAR

General Science 1, pp. 142, 143	3 hours
One of Mathematics 1c, p. 129	1 "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
One of *Greek 1f, p. 88	4 "
*Latin 1c, p. 90	4 "
*Hebrew 1b, p. 92	4 "
*German 1c, 1d, p. 90	4 "
*French 1f, p. 102	4 "
*Greek and Roman History 1, p. 91	1 "
*English 1a, 1d, pp. 96, 97	2 "
*Philosophy 1a, p. 122 or †*Psychology 1b, p. 126	2 "

SECOND YEAR

English 2a, 2b, p. 96	2 hours
One of Greek 2a or 2b, p. 87	3 "
Latin 2a, p. 89	3 "
Greek and Roman History 2a, p. 91	2 "
Hebrew 2b, p. 92	3 "
History 2a, p. 106	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
One of Political Economy 2a, p. 113	3 "
Anthropology 2a, p. 119	2 "
*Philosophy 2b, 2c, 2d, pp. 122, 123 or †2f, 2g, 2h, 2i, 2j, p. 125	6 "
*Psychology 2a, 2d, p. 127 or †2g, p. 126	4 "

THIRD YEAR

One of English 3a, 3b, p. 96	3 hours
Greek 3a, p. 87	3 "
Hebrew 3b, p. 92	3 "
Philosophy 5, p. 124	2 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
Political Economy 3e, p. 115	3 "
*Philosophy 3d, 3e, 3f, p. 123 and *Psychology 3b, 3d, p. 127; or	9 "
*†Philosophy 3i, 3j, 3k, 3l, 3m, 3n, p. 125 and *Psychology 3g, p. 126	11 "

†*St. Michael's College.*

\**Honours.*

## FOURTH YEAR

One of English 4a, 4b, p. 96	3 hours
Greek 4a, p. 87	3 "
Hebrew 4b, p. 92	3 "
Political Economy 4e, p. 116	3 "
Philosophy 5, p. 124	2 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*Philosophy 4c, 4d, 4e, 4f, pp. 123, 124 and *Psychology 4c, 4d, p. 127; or	11 "
*†Philosophy 4j, 4k, 4l, 4m, 4n, 4o, 4p, pp. 125, 126 and *Psychology 4g, p. 126	11 "

NOTE: Students who desire to specialize in Psychology may on petition be permitted to take Psychology 4f in place of one of the prescribed courses in Philosophy.

## PHILOSOPHY (ENGLISH OR HISTORY OPTION)

## ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in Philosophy (English or History Option) must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an equivalent examination in the following five subjects—Latin; Mathematics (Algebra and Geometry); one of History, English, Physics; one of Greek, French, German; together with an additional subject.

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance requirements, must do so at the examination of the First Year. See Sections 34-36, p. 19.

## FIRST YEAR

General Science 1, pp. 142, 143	3 hours
One of Mathematics 1c, p. 129	1 "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
One of *Greek 1f, p. 88	4 "
*Latin 1c, p. 90	4 "
*Hebrew 1b, p. 92	4 "
*German 1c, 1d, p. 99	4 "
*French 1f, p. 102	4 "
*Greek and Roman History 1, p. 91	1 "
*English 1a, 1c, 1d, pp. 96, 97	3 "
*History 1a, p. 107	2 "
*Philosophy 1a, p. 122 or *†Psychology 1b, p. 126	2 "

†*St. Michael's College.*

\**Honours.*

SECOND YEAR

Psychology 2a or 2a and 2d, p. 127 or †2g, p. 126	3 hours
One of Political Economy 2d, p. 113	1 "
Anthropology 2a, p. 119	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*English 2a, 2b, 2c, p. 97	4 "
*History 2d, 2e, p. 108	4 "
*Philosophy 2c, 2d, pp. 122, 123 or †2f, 2h, 2j, p. 125	3 "

NOTE: Students who may desire to specialize in Psychology after graduation should take Psychology 2d, 3b, 4d as their Pass Option.

THIRD YEAR

§One of English 3a, 3b, p. 96	3 hours
History 3a or 3b, p. 106	2 "
Philosophy 5, p. 124	3 "
Psychology 3a or 3b and 3d, p. 127 or †3g, p. 126	3 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
One of *English 3a, 3d, 3e, p. 97	5 "
*History 3c, 3d, pp. 109, 110	4 "
*Philosophy 3d, 3e, 3f, p. 123 or †3i, 3j, 3l, 3n, p. 125	6 "

FOURTH YEAR

§One of English 4a, 4b, p. 96	3 hours
History 4a or 4b or 4c, p. 107	2 "
Political Economy 4e, p. 116	3 "
Philosophy 5, p. 124	3 "
Psychology 4a or 4c and 4d, p. 127 or †4g, p. 126	3 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
One of *English 4a, 4d, 4f, pp. 95, 96	5 "
*History 4d, 4e, pp. 110, 111	3 "
*Philosophy 4c, 4e, 4g, pp. 123, 124 or †4j, 4k, 4l, 4n, 4o, pp. 125, 126	5 "

§In the Third and Fourth Years a student may not take both Pass and Honour English or both Pass and Honour History.

†St. Michael's College.

\*Honours.

## PSYCHOLOGY

The entrance conditions and the First Year prescription of this course will be found under the course in Science, p. 197.

## SECOND YEAR

English 2a, 2b, p. 96	2 hours
One of German 2b, p. 99	2 "
French 2b, p. 101	2 "
Anthropology 2a, p. 119	2 "
Mathematics 1r, 1s, p. 131	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Philosophy 2c, pp. 122, 123	2 "
*Psychology 2a, 2d, p. 127	4 "
*Physics 3b, 4, 5, 6 part, p. 135	5 "
*Zoology 7 part, p. 143	4 "

## THIRD YEAR

A reading knowledge of French and German for scientific purposes.

One of Political Economy 3e, p. 115	3 hours
Mathematics 2r, p. 131	2 "
Anthropology 2a, p. 119 (if not already taken)	2 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*Philosophy 3f, p. 123	2 "
*Psychology 3b, 3d, 2e, pp. 127, 128	6 "
*Zoology 20 part, p. 144	3 "
*Physiology 4 (a) and (c), p. 154	4 "

## FOURTH YEAR

A reading knowledge of French and German for scientific purposes.

One of Political Economy 4e, p. 116	3 hours
Zoology 28, p. 146	2 "
Psychology 4g, p. 127	2 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*Philosophy 4e, p. 124	1 "
*Psychology 4a, 4c, 4d, 4e, 4f, p. 127	11 "
*Anatomy 4, p. 152	2½"

## MATHEMATICS

## ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in Mathematics must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an

\*Honours.



equivalent examination in the following five subjects—Latin; Mathematics (Algebra and Geometry, Trigonometry); Physics; and French or German.

It is recommended that French be taken at Matriculation; but it is to be kept in mind that a reading knowledge of both German and French will be necessary in the Third and Fourth Years.

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

FIRST YEAR

English 1a, 1b, pp. 95, 96	2 hours
†One of German 1b, p. 98	2 "
French 1b, p. 101	2 "
One of Greek and Roman History 1, p. 91	1 "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
*Mathematics 1g, 1h, 1i, 1j, p. 129	6½"
*Actuarial Science 1a, p. 132	1 "
*Physics 1, 2, p. 135	6 "
*Chemistry 1, 14, pp. 156, 157	4 "

SECOND YEAR

English 2a, 2b, p. 96	2 hours
†One of German 2b, p. 99	2 "
French 2b, p. 101	2 "
One of History 2a, p. 106	2 "
Political Economy 2a, p. 113	3 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Mathematics 2h, 2i, 2j, 2k, p. 130	9 "
*Mechanics 2a, p. 132	1 "
*Actuarial Science 2a, p. 132	2 "
*Physics 4, 5, 6 part, p. 135	4½"

THIRD YEAR

One of History 3a or 3b, p. 106	2 hours
Political Economy 3b, p. 114	3 "
Mathematics 3b, p. 129 and Physics 29 part, p. 138	1 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*Mathematics 3g, 3h (without examination), 3i, 3j, 3k, p. 130	9 "
*Mechanics 3b, 3c, p. 132	3 "
One of *Actuarial Science 3a, 3b, p. 132	3 "
*Astronomy 2, 3, p. 133	4 "
*Physics 3a, 6 part, p. 135	3½"

†The selection of the language must be approved by the Staff in Mathematics.

\*Honours.

## FOURTH YEAR

One of History 4a or 4b or 4c, p. 107	2 hours
Political Economy 4c, p. 116	3 "
Mathematics 4c, p. 129 and Physics 29 part, p. 138	1 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	2 "
Military Studies 3, p. 165	3 "
One of *Mathematics 4k, p. 131	2 "
*Mechanics 4a, p. 132	2 "
*Actuarial Science 4a, p. 132	2 "
*Astronomy 4, p. 133	2 "
*Physics, one of 12, 13, 20, 21, 26 part; or two of 14, 15, 22, 23, 24, pp. 136-138	2 "
*Mathematics 4q, p. 131	3 "
Three of *Mathematics 4g, 4h, 4j, 4p, pp. 130, 131	6 "

## MATHEMATICS AND PHYSICS

## ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in Mathematics and Physics must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an equivalent examination in the following five subjects—Latin; Mathematics (Algebra and Geometry, Trigonometry); Physics; and French or German.

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

The prescription for the First Year of this course is the same as for the First Year of the course in Physics and Chemistry.

## FIRST YEAR

†One of German 1b, p. 98	2 hours
French 1b, p. 101	2 "
One of Greek and Roman History 1, p. 91	1 "
English 1a, 1b, pp. 95, 96	2 "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
*Mathematics 1g, 1i, 1j, 1k, p. 129	5 "
*Actuarial Science 1a, p. 132	1 "
*Physics 1, 2, 18 part, pp. 135, 137	7 "
*Chemistry 1, 13 part, pp. 156, 157	5 "

†The selection of the language must be approved by the staff in Mathematics and Physics.

\*Honours.

SECOND YEAR

†One of German 2b, p. 99	2 hours
French 2b, p. 101	2 "
One of English 2a, 2b, p. 96	2 "
History 2a, p. 106	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Mathematics 2h, 2i, 2j, p. 130	6 "
One of *Mathematics 2k part, p. 130	3 "
*Actuarial Science 2a, p. 132	2 "
*Mechanics 2a, p. 132	1 "
*Physics 3a, 4, 5, 6, p. 135	9 "

THIRD YEAR

One of History 3a or 3b, p. 106	2 hours
Mathematics 3b, p. 129 and Physics 29 part, p. 138	1 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*Mathematics 3g, 3h (without examination), p. 130	2 "
Two of *Actuarial Science 3a, 3b, p. 132	3 "
*Physics 14, p. 136	1 "
*Physics 15, p. 136	1 "
*Mechanics 3b, 3c, 4a, p. 132	3 "
*Astronomy 2, 3, p. 133	4 "
*Physics 12, 13, 17, pp. 136, 137	9½"

FOURTH YEAR

One of History 4a or 4b or 4c, p. 107	2 hours
Mathematics 4c, p. 129 and Physics 29 part, p. 138	1 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	2 "
Military Studies 3, p. 165	3 "
One of the following divisions:	
<i>Division I—Mathematics</i>	
Five of *Mathematics 4g, 4h, 4i, 4j, 4k, 4m, 4n, pp. 130, 131,	
*Astronomy 4, p. 133, the choice to be determined	
by the Department	10 hours
One of *Mathematics 4l, p. 131	1 "
*Actuarial Science 4a, p. 132	2 "

†The selection of the language must be approved by the staff in Mathematics and Physics.

\*Honours.

## FOURTH YEAR—Continued.

*Division II—Physics*

One of *Physics 25, p. 138	1 hour
*Mineralogy 3, p. 160	1 "
*Physics 20, 21, 22, 23, 24, 26, 27, pp. 137, 138	18 "

†*Division III—Astronomy and Physics*

*Mathematics 4h, p. 130	2 hours
*Mechanics 4b, 4c, p. 132	2½"
*Astronomy 4, 5, 6, 7, 8, p. 133, 134	15½"
*Physics 20, 27 ( <i>Light</i> ), pp. 137, 138	4 "

Candidates in the Astronomy and Physics Division are required to take the lectures of Course 20 during the Michaelmas Term and laboratory work in Optics of Course 27 for two afternoons a week during the Michaelmas Term.

†*Students may qualify for admission to Division III of the Fourth Year of this course by completing the first three years of the Honour Course in Mathematics.*

## PHYSICS AND CHEMISTRY

## ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in Physics and Chemistry must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an equivalent examination in the following five subjects: Latin; Mathematics (Algebra and Geometry, Trigonometry); Physics or Chemistry; and French or German.

A student admitted to this course on probation by special petition who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

The prescription for the First Year of this course is the same as for the First Year of the course in Mathematics and Physics..

## FIRST YEAR

‡One of German 1b, p. 98	2 hours
French 1b, p. 101	2 "
One of Greek and Roman History 1, p. 91	1 "
English 1a, 1b, pp. 95, 96	2 "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "

‡*The selection of the language must be approved by the staff in Physics and Chemistry.*

\**Honours.*

FIRST YEAR—*Continued.*

*Mathematics 1g, 1i, 1j, 1k, p. 129	5 hours
*Actuarial Science 1a, p. 132	1 "
*Physics 1, 2, 18 part, pp. 135, 137	7 "
*Chemistry 1, 13 part, pp. 156, 157	5 "

SECOND YEAR

†One of German 2b, p. 99	2 hours
French 2b, p. 101	2 "
One of English 2a, 2b, p. 96	2 "
Chemistry 6b, p. 156	
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Mathematics 2h, 2i, p. 130	4 "
*Mechanics 2a, p. 132	1 "
*Physics 3a, 4, 5, 6, p. 135	9 "
*Chemistry 3, 7, 9, 16 part, pp. 156, 157	13 "

THIRD YEAR

†A reading knowledge of French and German for scientific purposes.	
One of Mathematics 3b, p. 129, and Physics 29 part, p. 138	1 hour
Astronomy 2, p. 133	2 hours
Chemistry 6b, p. 156	2 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*Mathematics 3g, 2j part, p. 130	2 "
*Physics 12, 13, 15, 17, pp. 136, 137	12½ "
*Mechanics 3b, 3c, p. 132	2¼ "
*Chemistry 4, 8, 10, 19, 20, pp. 156, 157	12¼ "

FOURTH YEAR

†A reading knowledge of French and German for scientific purposes.	
One of Physics 29 part, p. 138.	
Chemistry 6a, p. 156	
Mineralogy 6, p. 160	2 hours
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*Physics 20, 23, 26 part, pp. 137, 138	5 "
*Chemistry 6b, 11, p. 156	2 "
One of *Physics 27, p. 138	
*Chemistry 21, p. 157	

†The selection of the language must be approved by the staff in Physics and Chemistry.

\*Honours.

## SCIENCE

## ENTRANCE CONDITIONS

It is to be noted that the Entrance Conditions and First Year prescription are common to all the following Science Courses: Physics, Biology, Physiology and Biochemistry, Biological and Medical Sciences, Chemistry, Chemistry Mineralogy and Geology, Geology and Mineralogy, Science (General) and Psychology.

A candidate for admission to the First Year of any of the above Honour Courses must present, in addition to complete Pass Matriculation standing, certificates giving him credit at the Honour Matriculation or an equivalent examination in the following five subjects—Latin; Mathematics (Algebra and Geometry, Trigonometry); French or German; and one of Physics, Zoology, Botany, Chemistry.

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

## FIRST YEAR

English 1a, 1b, pp. 95, 96	2 hours
German 1b, p. 98	2 "
French 1b, p. 101	2 "
One of Mathematics 1c, p. 129	1 "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
*Physics 1, 2, 18, pp. 135, 137	6½"
*Zoology 5, 6, p. 143	3¼"
*Botany 5, 6, p. 148	3¼"
*Chemistry 1, 13, pp. 156, 157	6½"
*Geology and Palaeontology 5, p. 158	1 "

## PHYSICS

The Entrance Conditions and First Year prescription of this course will be found under the course in Science, page 197.

## SECOND YEAR

†One of German 2b, p. 99	2 hours
French 2b, p. 101	2 "
One of English 2a, 2b, p. 96	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Mathematics 1i, 2g, pp. 129, 130	4 "
*Physics 3a, 4, 5, 6, p. 135	9 "
*Chemistry 3, 7, 15, 24, pp. 156, 157	8 "

†The selection of the language must be approved by the Staff in Physics.

\*Honours.

### THIRD YEAR

A student in the Faculty of Arts who has completed the Second Year in the Honour Course of Mathematics or Chemistry or Chemistry Mineralogy and Geology, may enter the Third Year of the Honour Course in Physics.

A student in the Faculty of Applied Science and Engineering, who has passed the examination of the First and Second Years with honours in any one of the Departments of Civil, Mining, Mechanical, Chemical, Electrical and Metallurgical Engineering, may enter the Third Year of the Honour Course in Physics, provided that he has met the language requirements of the First Year of that course with respect to Latin, English and French or German at the Honour Matriculation or equivalent examination.

One of Mathematics 3b, p. 129 and Physics 29 part, p. 138	1 hour
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 hours
Military Studies 2, p. 165	3 "
†A reading knowledge of French and German for scientific purposes.	
*Mathematics 2j first half, 3g, p. 130	2 "
*Mechanics 2a, p. 132	1 "
*Physics 12, 13, 14, 15, 17, pp. 136, 137	12 "

### FOURTH YEAR

One of Mathematics 4c, p. 129 and Physics 29 part, p. 138	1 hour
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 hours
Military Studies 3, p. 165	3 "
*Mechanics 4a, p. 132	2 "
One of *Physics 25, p. 138	1 "
*Mineralogy 3, p. 160	1 "
*Physics 20, 21, 22, 23, 24, 26, 27, pp. 137, 138	18 "

### BIOLOGY

The Entrance Conditions and First Year prescription of this course will be found under the course in Science, page 197.

### SECOND YEAR

English 2a, 2b, p. 96	2 hours
†One of German 2b, p. 99	2 "
French 2b, p. 101	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "

†The selection of the language must be approved by the staff in Physics.

†The selection of the language must be approved by the staff in Biology.

\*Honours.

SECOND YEAR—*Continued.*

*Physics 3b, 4, 5, 6, p. 135	7 hours
*Zoology 9, p. 143	4 "
*Botany 7, 9, p. 148	4 "
*Chemistry 3, 7, 15, 24, pp. 156, 157	8 "
*Geology and Palaeontology 6, 7, p. 158	3 "

## THIRD YEAR

One of English 3a, 3b, p. 96	3 hours
Psychology 2c, p. 127	2 "
Astronomy 2, p. 133	2 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*Zoology 7, 8, 12, 13, pp. 143, 144	9 "
*Botany 12, 19, pp. 148-150	9 "
*Biochemistry 1, 3, p. 152	7 "

## FOURTH YEAR

One of Zoology 16, p. 144	2 hours
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*Zoology 21, p. 145	
*Botany 16, p. 149	
*Zoology 15, p. 144 or *Botany 20, p. 150	

A selection of twenty hours from the following divisions, subject to the approval of the Department and the conditions set forth below:

*Division I—Zoology*

*Zoology 14, 17, 18 19 and 20, 22, 23, 24, 25, pp. 144, 145	each 4 hours
---	--------------

*Division II—Botany*

*Botany 10 or 11, 12, 19, 18, 20a, 22, 8 and 15, 8 and 23, pp. 148-150	each 4 hours
--	--------------

At least one course must be taken in each division. The four remaining courses may be taken in one or both divisions.

Special work in one subject already selected may be substituted for one course otherwise necessary.

Students may in exceptional cases substitute for one of the courses a course of corresponding standard in another department.

Note—Students proceeding to graduate or special work, in which an acquaintance with the original literature is required, are advised to seek proficiency in reading scientific French and German during their undergraduate course.

*\*Honours.*



## PHYSIOLOGY AND BIOCHEMISTRY

The Entrance Conditions and First Year prescription of this course will be found under the course in Science, page 197.

The curriculum of this course in the First and Second Years is almost identical with that of Biological and Medical Sciences (the combined course in Arts and Medicine). During the Third and Fourth Years the curriculum is arranged for specialization in Physiology and Biochemistry; *without special reference to Medicine.*

## SECOND YEAR

English 2a, 2b, p. 96	2 hour
Mathematics 1r, 1s, p. 131	2 "
One of German 2b, p. 99	2 "
French 2b, p. 101	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Physics 3b, 4, 5, 6, p. 135	7 "
*Zoology 7, 8, p. 143	7 "
*Chemistry 3, 7, 15, 24, pp. 156, 157	8 "

## THIRD YEAR

One of †Astronomy 2, p. 133	2 hour
†Zoology 16, p. 144	2 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
Mathematics 2r, p. 131	2 "
A reading knowledge of Scientific French or German.	
*Physics 25, p. 138	½ "
*Anatomy 2, p. 151	8 "
*Biochemistry 1, 3, p. 152	7 "
*Physiology 1, 2, 5, pp. 154, 155	7 "
*Chemistry 4, 19 part, pp. 156, 157	8 "

## FOURTH YEAR

One of †Astronomy 2, p. 133	2 hour
†Zoology 16, p. 144	2 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "

†If either of these subjects is taken in the Third Year it cannot constitute an option in the Fourth Year.

\*Honours.

FOURTH YEAR—*Continued.*

A reading knowledge of Scientific French or German.	2 hours
Mathematics 3r, p. 132	3 "
*Physics 19, p. 137	4 "
*Botany 19, pp. 149, 150	
One of the following divisions:	
<i>Division I—Biochemistry</i>	
*Chemistry 20 part, p. 157	3 hours
*Biochemistry 2, 4, 5, pp. 152, 153	8 "
*Special work in Biochemistry or Zymology or Organic Chemistry or Physical Chemistry	10 "
<i>Division II—Physiology</i>	
*Biochemistry 2, 4 part, p. 152	5 "
*Physiology 3, 4, 6, 8, pp. 154, 155	16 "

## BIOLOGICAL AND MEDICAL SCIENCES

The Entrance Conditions and First Year prescription of this course will be found under the course in Science, page 197.

## SECOND YEAR

English 2a, 2b, p. 96	2 hours
Mathematics 1r, 1s, p. 131	2 "
One of German 2b, p. 99	2 "
French 2b, p. 101	2 "
†Psychology 2c, pp. 127, 128	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Physics 3b, 4, 5, 6, p. 135	7 "
*Zoology 7, 8, p. 143	7 "
*Chemistry 3, 7, 15, 24, p. 156, 157	8 "

## THIRD YEAR

One of †Psychology 3c, p. 127	2 hours
Mathematics 2r, p. 131	2 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*Anatomy 1, 2, 3, p. 151	17½ "
*Biochemistry 1, 3, p. 152	7 "
*Physiology 2, 4 part, 5, pp. 154, 155	7 "
*Honours.	

FOURTH YEAR

One of †Psychology 4c, p. 127	2 hours
Mathematics 3r, p. 132	2 "
Physics 19, p. 137	3 "
Zoology 16, p. 144	2 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*Anatomy 4, 5, p. 152	8 "
*Biochemistry 2, p. 152	2 "
*Physiology 1, 3, 4 continued, 8, pp. 154, 155	8 "
*Bacteriology: Third Year course in the Faculty of Medicine	5½"
*Special work in one subject to be arranged with head of department of subject elected by student	5 "

†A student desiring to take special honour work in Psychology in the Fourth Year must have credit for Psychology 2c and 3c before he enters the Fourth Year. A student who was unable to take Psychology 2c in the Second Year, may with the consent of the staff, take that course in the Third Year instead of Psychology 3c which he must then take in the Fourth Year.

Under the regulations of the Faculty of Medicine a student who has been awarded a Pass Degree in this course will not be permitted to register in the Fourth Year in the above faculty.

CHEMISTRY

The Entrance Conditions and First Year prescription of this course will be found under the course in Science, page 197.

SECOND YEAR

English 2a, 2b, p. 96	2 hours
†One of German 2b, p. 99	2 "
French 2b, p. 101	2 "
One of Chemistry 6b, p. 156	
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Mathematics 2g, p. 130	2 "
*Physics 3a, 4, 5, p. 135	3 "
*Chemistry 3, 7, 9, 16, 17, pp. 156, 157	
*Mineralogy and Petrography 1, 2, p. 160	2 "

†Selection to be approved by the Staff in Chemistry.

\*Honours.

## THIRD YEAR

A reading knowledge of French and German for scientific purposes.

One of Chemistry 6b, p. 156	
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 hours
Military Studies 2, p. 165	3 "
*Mathematics 3g, p. 130	1 "
*Chemistry 4, 8, 10, 12a, 12b, 19, 20, p. 156, 157	
*Mineralogy and Petrography 3, p. 160	1 "

## FOURTH YEAR

A reading knowledge of French and German for scientific purposes.

One of Chemistry 6b, p. 156	
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 hours
Military Studies 3, p. 165	3 "
*Chemistry 5, 6a, 11, 21, pp. 156, 157	

## CHEMISTRY MINERALOGY AND GEOLOGY

The Entrance Conditions and First Year prescription of this course will be found under the course in Science, page 197.

## SECOND YEAR

English 2a, 2b, p. 96	2 hours
†One of German 2b, p. 99	2 "
French 2b, p. 101	2 "
One of Chemistry 6b, p. 156	
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Mathematics 2g, p. 130	2 "
*Chemistry 3, 7, 9, 16, pp. 156, 157	
*Geology and Palaeontology 6, 7, p. 158	3 "
*Mineralogy and Petrography 1, 3, 4, p. 160	5 "

## DIVISION I.—THIRD YEAR—CHEMISTRY AND MINERALOGY

‡A reading knowledge of French and German for scientific purposes.

One of History 3a or 3b, p. 106	2 hours
Chemistry 6b, p. 156	
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "

†Selection to be approved by the Staff in Chemistry, Mineralogy and Geology.

‡Proficiency is required in both languages.

\*Honours.

THIRD YEAR—*Continued.*

*Mathematics 3g, p. 130	1 hour
*Physics 6, p. 135	6 hours
(In 1928-1929—*Physics 3a, 6 part, p. 135	4½"
*Chemistry 4, 8, 10, 12a, 19, 20, pp. 156, 157	
*Mineralogy and Petrography 6, p. 160	2 "

DIVISION I.—FOURTH YEAR—CHEMISTRY AND MINERALOGY

†A reading knowledge of French and German for scientific purposes.	
One of History 4a or 4b or 4c, p. 107	2 hours
Chemistry 6b, p. 156	
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
*Physics 16, p. 137	¾ "
One of *Zoology 9, 12, pp. 143, 144, and *Botany 7, 9, p. 148	4 "
A defined part of *Chemistry 21, p. 157	
*Chemistry 5, 6a, 11, 21, pp. 156, 157	

DIVISION II.—THIRD YEAR—MINERALOGY AND GEOLOGY

One of English 3a, 3b, p. 96	3 hours
Astronomy 2, p. 133	2 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
†A reading knowledge of French and German for scientific purposes.	
*Physics 6, p. 135	6 "
(In 1928-1929—*Physics 3a, 4, 6, p. 135	8½"
*Chemistry 8, p. 156	
*Geology and Palaeontology 8, 9, 10, 11, 25, pp. 158-160	9½"
*Mineralogy and Petrography 5, 6, 7, 8, 11, pp. 160, 161	10 "

DIVISION II.—FOURTH YEAR—MINERALOGY AND GEOLOGY

One of English 4a, 4b, p. 96	3 hours
Mineralogy 15, p. 161	2 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
†A reading knowledge of French and German for scientific purposes.	
*Physics 33, p. 139	3 "
One of *Zoology 9, 12, pp. 143, 144	4 "
*Botany 7, 9, p. 148	4 "
*Geology and Palaeontology 14, 16, p. 159	5 "
*Geology and Palaeontology 12, 13, 15, 20, p. 159	5 "
*Mineralogy and Petrography 9, 10, 12, 13, 14, 17, p. 161	14½"

†Proficiency is required in both languages.

\*Honours.

## GEOLOGY AND MINERALOGY

The Entrance Conditions and First Year prescription of this course will be found under the course in Science, page 197.

## SECOND YEAR

English 2a, 2b, p. 96	2 hours
†One of German 2b, p. 99	2 "
French 2b, p. 101	2 "
One of Geology and Palaeontology 17, p. 159	1 "
Mathematics 2g, p. 130	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Physics 3b, 4, 5, 6, p. 135	7 "
*Zoology 9, p. 143	4 "
*Botany 7, p. 148	3 "
*Chemistry 3, 7, 15, 24, pp. 156, 157	8 "
*Geology and Palaeontology 6, 7, p. 158	3 "
*Mineralogy and Petrography 1, 2, p. 160	2 "

## THIRD YEAR

One of English 3a, 3b, p. 96	3 hours
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies, 2, p. 165	3 "
§A reading knowledge of French and German for scientific purposes.	
*Chemistry 17, p. 157	
*Geology and Palaeontology 8, 9, 10, 11, pp. 158, 159	9 "
*Mineralogy and Petrography, 3, 4, 6, 8, 11, pp. 160, 161	9 "

## FOURTH YEAR

One of English 4a, 4b, p. 96	3 hours
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
Military Studies 3, p. 165	3 "
§A reading knowledge of French and German for scientific purposes.	
One of *Zoology 25 part, p. 145	3 "
*Botany 9, 18, pp. 148, 149	3 "
*Geology and Palaeontology 14, p. 159 and *Mineralogy and Petrography 14, p. 161	3 "
*Geology and Palaeontology 12, 13, 15, 16, 18, 19, 20, 22, 23, 24, 25, pp. 159, 160	16 "
*Mineralogy and Petrography 5, 12, 13, pp. 160, 161	7 "

†Selection to be approved by the Staff in Geology and Mineralogy.

§Proficiency in both languages is required.

\*Honours.

SCIENCE (GENERAL)

The Entrance Conditions and First Year prescription of this course will be found under the course in Science, page 197.

SECOND YEAR

English 2a, 2b, p. 96	2 hours
One of German 2b, p. 99	2 "
French 2b, p. 101	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
Military Studies 1, p. 165	2 "
*Mathematics 2g, p. 130	2 "
*Physics 3b, 6 part, p. 135	4 "
*Zoology 9, p. 143	4 "
*Botany 7, 9, p. 148	4 "
*Chemistry 7, 15, pp. 156, 157	6 "
*Geology and Palaeontology 6, 7, p. 158	3 "
*Mineralogy and Petrography 1, 2, p. 160	2 "

THIRD YEAR

One of History 3a or 3b, p. 106	2 hours
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
Military Studies 2, p. 165	3 "
*Astronomy 2, p. 133	2 "
*Physics 4, 5, 6 part, 13, 17 part, pp. 135-137	8 "
*Zoology 7 part, 12, pp. 143, 144	3 "
*Botany 19, pp. 149, 150	4 "
*Chemistry 3, p. 156	2 "
*Geology and Palaeontology 8, p. 158	2 "
*Mineralogy and Petrography 3, 4, p. 160	4 "

FOURTH YEAR

One of History 4a or 4b or 4c, p. 107	2 hours
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	2 "
Military Studies 3, p. 165	3 "
*Astronomy 3, p. 133	2 "
*Physics (to be selected)	4 "
*Zoology 25, p. 145 or *Botany 12, p. 148	4 "
*Chemistry 8, 25, pp. 156, 157	4 "
*Geology and Palaeontology 13, 18, p. 159	} 4 "
*Mineralogy and Petrography 6 part, 11, pp. 160, 161	
One of *Physics (to be selected)	4 "
*Zoology 25, p. 145	4 "
*Botany 10 or 12, 20, pp. 148, 150	4 "
*Chemistry (to be selected)	4 "
*Geology and Palaeontology 15, 16, p. 159	4 "
*Mineralogy and Petrography 9, 12, 14, p. 161	4 "

\*Honours.

## HOUSEHOLD SCIENCE

## ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in Household Science must present, in addition to complete Pass Matriculation standing, certificates giving her credit at the Honour Matriculation or an equivalent examination in the following five subjects—Latin; Mathematics (Algebra and Geometry, Trigonometry); French or German; and one of Physics, Zoology, Botany, Chemistry.

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

## FIRST YEAR

English 1a, 1b, pp. 95, 96	2 hours
German 1b, p. 98	2 "
French 1b, p. 101	2 "
One of Mathematics 1c, p. 129	1 "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
*Physics 1, 2, 18, pp. 135, 137	6½"
*Zoology 5, 8, p. 143	3¼"
*Botany 5, 6, p. 148	3¼"
*Chemistry 1, 13, pp. 156, 157	6½"
*Household Science 1b, p. 162	1 "

## SECOND YEAR

English 2a, 2b, p. 96	2 hours
One of German 2b, p. 99	2 "
French 2b, p. 101	2 "
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
*Physics 3b, 4, 5, 6, p. 135	7 "
*Zoology 10, p. 144	2 "
*Botany 13, p. 149	2 "
*Chemistry 3, 7, 15, 24, pp. 156, 157	8 "
*Household Science 2a part, p. 162	6 "

## THIRD YEAR

One of English 3a, 3b, p. 96	3 hours
Philosophy 3a, p. 121 or †3g, p. 124	3 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
*Biochemistry 1, 3, p. 152	7 "
*Physiology 2, 5, pp. 154, 155	4 "
*Household Science 3b, p. 162	12 "
*Hygiene and Sanitation	1 "

†*St. Michael's College.*

\**Honours.*



FOURTH YEAR

One of English 4a, 4b, p. 96	3 hours
Philosophy 4a, p. 122 or †4h, p. 124	3 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
*Food Chemistry 1, 3, p. 153	10 "
*Household Science 4b, 4c, 4d, p. 162	10 "

HOUSEHOLD ECONOMICS

ENTRANCE CONDITIONS

A candidate for admission to the First Year of the Honour Course in Household Economics must present, in addition to complete Pass Matriculation standing, certificates giving her credit at the Honour Matriculation or an equivalent examination in the following five subjects—Latin; Mathematics (Algebra and Geometry); two of English, French or German, Physics, Zoology, Botany, Chemistry; together with an additional subject; the candidate is recommended to take French or German and a Science.

A student admitted to this course on probation by special petition, who has not fulfilled all the entrance conditions, must do so at the examination of the First Year. See Sections 34-36, p. 19.

FIRST YEAR

English 1a, 1b, pp. 95, 96	2 hours
One of German 1a, p. 98	4 "
French 1a, p. 101	4 "
One of Household Science 1a, p. 161	1 "
Religious Knowledge 1a or 1b or 1c or 1d, p. 164	1 "
*Physics 28, p. 138	4 "
*Zoology 5, 6, p. 143	3¼"
*Botany 5, 6, p. 148	3¼"
*Chemistry 1, 13, pp. 156, 157	6½"
*Household Science 1b, p. 162	1 "

SECOND YEAR

One of English 2a, 2b, p. 96	2 hours
Religious Knowledge 2a or 2b or 2c or 2d or 2e, p. 164	2 "
One of German 2a, p. 98	3 "
French 2a, p. 101	3 "
*Zoology 10, p. 144	2 "
*Botany 13, p. 149	2 "
*Chemistry 3, 15 part, pp. 156, 157	4 "
*Household Science 2a, p. 162	10 "
*Physiology 9, p. 155	1 "

†*St. Michael's College.*

\**Honours.*

## THIRD YEAR

Philosophy 3a, p. 121 or †3g, p. 124	3 hours
One of English 3a, 3b, p. 96	3 "
Religious Knowledge 3a or 3b or 3c or 3d or 3e or 3f, p. 164	3 "
*Biochemistry 1, 3, p. 152	7 "
*Household Science 3b, p. 162	12 "
*Hygiene and Sanitation	1 "

## FOURTH YEAR

Political Economy 4h, p. 117	3 hours
One of English 4a, 4b, p. 96	3 "
Philosophy 4a, p. 122 or †4h, p. 124	3 "
Religious Knowledge 4a or 4b or 4c or 4d or 4e or 4f, p. 164	3 "
*Food Chemistry 1, 2, p. 153	8 "
*Household Science 4b, 4c, 4d, p. 162	10 "

†*St. Michael's College.*

\**Honours.*

## DEGREE OF BACHELOR OF COMMERCE

### COMMERCE AND FINANCE

The course in Commerce and Finance (formerly included as an Honour Course in Arts) and the Course in Commerce have been amalgamated. The new course, called hereafter Commerce and Finance, leads only to the Degree of Bachelor of Commerce.

The intention of the course is to provide a training for business (including finance as well as manufacturing and trade) and at the same time to prepare applicants for the consular service, trade commissioner-ships abroad, the foreign representation of Canadian firms, employment management, and the statistical departments of large business houses.

#### ENTRANCE REQUIREMENTS

Pass Matriculation: English, History, Mathematics and three of Greek, Latin, French, German, Italian or Spanish, Experimental Science (Physics and Chemistry), or Agriculture (Parts I and II).

Honour Matriculation: English, Mathematics (Algebra, Geometry and Trigonometry), and two of Latin, French, German, Italian or Spanish, Physics or Zoology or Botany or Chemistry.

A student who submits a Part I Commercial Specialists' Certificate may substitute the same for Ancient History and a language of Pass Matriculation and for the Geometry and Trigonometry of Honour Matriculation.

#### STANDING IN THE COURSE

1. In order to secure standing in the First, Third or Fourth Year of the course, a candidate must have obtained (a) at least fifty per cent. in each subject of the course marked with an asterisk, all of the term and examination marks in the subject being taken into account for this purpose, as well as (b) credit as defined in Section 4 in all, or all but one of the subjects not so marked.

2. In order to secure standing in the Second Year of the Course, a candidate must have obtained (a) at least fifty per cent. in each subject of the course marked with an asterisk (as in Section 1), together with an average of at least sixty per cent. in such subjects, as well as (b) credit as defined in Section 4 in all, or all but one of the subjects not so marked. In the Session 1928-1929 this regulation will be extended to include the Third Year and in the Session 1929-1930 the Fourth Year.

3. A candidate who has failed to obtain an average of fifty per cent. in a subject marked with an asterisk will not be permitted to write a supplemental examination in any paper or papers of that subject, and, if he desires to proceed in the course, will be required to repeat the entire work of the year.

4. To obtain credit in a subject not marked with an asterisk, a candidate must obtain at least fifty per cent. of the examination marks and fifty per cent. of the aggregate of the term and examination marks in the subject.

5. A candidate who has failed in any year in two of the subjects referred to in Section 4, will have his standing deferred until he has passed in both of these subjects; he will be debarred from registration and enrolment in the next higher year until he has passed in at least one of these subjects and has fulfilled the conditions of Section 7.

6. In the case of a candidate who has failed to secure standing at the examination of the First or Second Year, an attempt will be made by the Examiners to arrange for his transfer to the Pass Course leading to the degree of Bachelor of Arts, provided that the candidate has credit for Pass Latin of the First Year. Such a transfer cannot be made at the end of the Third Year. A candidate so transferred may accept the transfer or may repeat the year of the course in Commerce and Finance in which he has failed to obtain standing.

7. A candidate must obtain complete standing in the First Year before he can register in the Third Year; and he must obtain complete standing in the Second Year before he can register in the Fourth Year.

8. A candidate who has fulfilled the conditions of Section 1 or Section 2 and has secured standing in his year, will be awarded first class honours in order of merit provided he has obtained an average of at least seventy-five per cent. of all the marks assigned to the subjects marked with an asterisk, such a candidate will be awarded second class honours in order of merit provided he has obtained an average of at least sixty-six per cent.; such a candidate will be awarded third class honours provided he has obtained an average of at least sixty per cent. A candidate who has fulfilled the conditions of Section 1 but has obtained an average of less than sixty per cent. will be given Pass standing.

9. Grading in individual subjects will be based upon Sections 79 and 84 of the calendar of the Faculty of Arts.

#### TERM WORK

10. In a subject in which marks are given for term work the marking will be determined in the manner considered most suitable by the teaching staff in that subject.

11. A student who has failed to obtain standing at the May examination and who is repeating his year must repeat his term work unless under exceptional circumstances he be exempted from part or all of such term work by the Council on the recommendation of his College and of the Department or Departments concerned.

GENERAL REGULATIONS FOR THE COURSE

12. A candidate will not be granted exemption from lectures and examination in any subject of the First Year.

13. Before entering upon his Fourth Year a candidate must produce evidence of service satisfactory to the Council of the Faculty of Arts, showing that he has been employed with a commercial firm, in the public service, or in some business capacity for at least three months. Before taking such employment the student should obtain the approval of the Supervisor of Studies for the Course in Commerce and Finance. This evidence must be placed in the hands of the Registrar before or at the time of registration in the Fourth Year.

14. Students should consult the Supervisor of Studies for the Course in Commerce and Finance before selecting their options in the First Year. The Supervisor will be present in Baldwin House from 10 a.m. to 4 p.m. from September 23rd to the end of registration.

FIRST YEAR

One of English 1a, 1d, pp. 96, 97	2 hours
History 1a, 1b, pp. 107, 108	2 "
§One of Latin 1a, p. 89	4 "
German 1f, 1g, p. 99	3 "
French 1c, 1d, 1e, p. 102	4 "
Italian 1a or 1c, pp. 103, 104	4 "
Spanish 1a or 1d, p. 105	4 "
Mathematics 2g, p. 130	2 "
*Economic Geology and Geography: Geology and Palaeontology 21, 26, pp. 159, 160 and Political Economy 1a, p. 113	4 hours
*Accounting 1a, p. 119	2 "
*Mathematics 11, p. 130	2 "
*Actuarial Science 1a, p. 132	1 "

§Note—If a language is chosen in the First Year it must be continued throughout the four years; a student who wishes to take Actuarial Science in the Third and Fourth Years must take Mathematics 2g and 3c in the First and Second Years respectively.

\*See Sections 1, 2 and 3, pp. 210, 211.

## SECOND YEAR

One of English 2a, 2b, p. 96	2 hours
History 2g, p. 109	2 "
Philosophy 2a (i), p. 121 or †2e, p. 124	2 "
One of Latin 2a, p. 89	3 "
German 2f, p. 99	3 "
French 2c, 2d, 2e, p. 102	4 "
Italian 2a or 2b, p. 104	3 "
Spanish 2a or 2b, p. 105	3 "
Mathematics 3c, p. 129	3 "
*Political Economy 2a, 2b, 2c, p. 113	9 "
*Accounting 2a, p. 119	2 "
*Actuarial Science 2a, p. 132	2 "

## THIRD YEAR

One of Latin 3a, p. 89	3 "
German 3f, p. 100	3 "
French 3b, p. 102	2 "
Italian 3d, p. 104	3 "
Spanish 3e or 3f, p. 105	3 "
Actuarial Science 3a, 3b, p. 132	3 "
*Political Economy 3a, 3b, 3c, 3d, 4g, pp. 114-116	12 "
*Accounting 3a, 3b, p. 120	2 "

## FOURTH YEAR

One of Latin 4a, p. 89	3 hours
German 4f, p. 100	3 "
French 4b, p. 102	2 "
Italian 4d, p. 104	3 "
Spanish 4e or 4f, p. 106	3 "
Actuarial Science 4a, p. 132	2 "
Law 4e, pp. 118-119	1 "
*Political Economy 4a, 4d, 4g, 4i, pp. 115-117 and two of 4b, 4c, 4e, 4f, 4j, pp. 115-117	12 "

By arrangement with the Department of Education graduates who have obtained an average of sixty-six per cent. in this course at graduation will be given recognition for the following subjects, which are part of the non-professional requirements for the Commercial Specialists' Certificate: Mercantile Arithmetic, Arithmetic of Investment, Auditing, Money and Banking, Theory of Economics, Economic Geography and History of Commerce and Industry.

†*St. Michael's College.*

\**See Sections 1, 2 and 3, pp. 210, 211.*

Under the regulations of the Institute of Chartered Accountants of Ontario, in order to become Chartered Accountants, graduates of the course will be required to serve only three years in the office of a practising Chartered Accountant, and to pass the intermediate and final examinations of the Institute. This amounts to an exemption in favour of graduates in Commerce and Finance of two years practical experience and the primary examination.





---

SUMMER SESSION

---

## SUMMER SESSION, 1927

---

### THE TEACHERS' COURSE

(LEADING TO THE B.A. DEGREE)

Lectures will commence on Monday, July 4th, at 10 a.m., and the time-table will provide for lectures on six days of the week except that there will be no lectures on Saturday afternoons or on Civic Holiday. Lectures will close on Saturday, August 13th. Cards of admission must be secured at the Extension Office, Simcoe Hall.

Applications should be made on the form provided, which may be obtained on application, and should be forwarded to the Director of University Extension on or before June 6th. Applications will be accepted up to July 4th, but subjects not mentioned in this Calendar cannot be arranged for after June 6th. The regulations governing the Teachers' Course, on pages 364 to 365 of this Calendar should be carefully read.

### COURSES FOR SPECIALISTS' CERTIFICATES

The Committee in charge of the arrangements for honour courses in the Summer Session has found that the requests for instruction are so varied that it is extremely difficult to decide what subjects should, in the interests of all, be offered in the Summer Session of 1927.

Some teachers require only one subject in order to make their standing what they desire. These should remember that it is quite in order to get up such a subject for themselves, under guidance if desired, without any attendance at lectures.

Taking all factors into consideration, the Committee suggests for July and August, 1927: Second Year Honour Physics, Second Year Honour Latin, Second Year Honour French, and also guidance, without formal lectures, in Third and Fourth Year Honour History.

Judging by the number of applications, it will be necessary to leave First Year Honour Mathematics until 1928. For those who will commence work this summer, First Year Honour French or First Year Honour Latin are possibilities, if ten or more should ask for them.

Those who wish to avail themselves of the arrangement outlined above should write at once to the Registrar, University of Toronto, if they have not already done so, stating when and in what course they graduated and in which department it is desired to secure a specialist's certificate. Each applicant will receive from the Registrar a complete statement of the work that he or she will be required to do.

Having received the Registrar's statement, the student will, as early as possible and in any case before May 1st, write to the Department of University Extension, University of Toronto, making application for a summer course in such subject or subjects as he or she may wish to take.

The conditions under which graduates of other Universities may secure the academic qualification may be ascertained by submitting a full statement, accompanied by certificates of the work done, to the Registrar of the University for submission to the Committee appointed to consider and determine such cases.

#### FEES

For instruction in the Summer Session .....	\$40.00
For assistance by correspondence, per subject.....	10.00
For examination, per subject, \$5.00; maximum fee.....	10.00
Laboratory fee in science courses.....	5.00

#### COURSES IN PEDAGOGY

Those intending to take summer instruction in any of the subjects of the courses in Pedagogy should write to the Dean of the Ontario College of Education, 371 Bloor St. West, Toronto 5. Particulars of these courses will be found on pages 365 to 367 of this Calendar. Registration takes place at the Ontario College of Education. Lectures commence on July 4th and close on August 5th.

#### RESIDENCES

The University Residences will be open, as usual, for the accommodation of students, until August 5th.

Those who wish to secure lodging in the residences should make application to Mr. A. T. Laidlaw, Registrar's Office, University of Toronto, early in June. A deposit fee of \$5.00 should accompany the application.

#### LIBRARY

Students of the Summer Session will be admitted to the privileges of the University Library.

## HART HOUSE

Summer membership in Hart House is optional for men students in the Summer Session. The fee is \$2.00. The privileges available during the summer are:—

1. Use of the Swimming Pool from 2 to 9 p.m. daily (except Sunday).
2. Use of the Barber Shop (cigarettes, chocolate bars, etc. also sold here).
3. Use of the Reading Room (Illustrated London News, Punch, American Mercury, Literary Digest, Edinburgh Review, Quarterly Review and the Round Table taken in).

It should be clearly understood by Summer Session students that Hart House is not a public building in the same sense as the other University buildings but is dependent for its upkeep on the fees of its members and other sources. It therefore should not be used by others than members.

## WOMEN'S UNION

The University College Women's Union will be open to women students in the Summer Session during at least the month of July and probably longer. The summer fee is \$1.00. Luncheon is served each day during July for 30 cents to members and 35 cents to non-members. The well-equipped rest rooms and reading rooms are open to those who take out summer membership.

## THE TEACHERS' COURSE

(LEADING TO THE B.A. DEGREE)

## ADMISSION

Applications for admission to the University are to be made on the special forms provided and must be accompanied by all secondary school certificates held by the applicant. Certificates should be sent by registered mail; they are returned as soon as their purpose has been served.

## FEES

Tuition—Each subject, \$15.00.

For admission by certificate to the Second Year..... \$15.00

For admission *ad eundem statum*..... \$10.00

For the degree..... \$10.00

Examinations—\$2.00 each subject. If a student fails on an examination in any subject, a fee of \$5.00 must be paid for each subsequent examination in that subject.

Laboratory—For Practical Work in the laboratory, a deposit fee is required at the beginning of the Session to cover breakages. All, or part, of the fee is returned at the close of the Session according to the value of the breakages.

# EXAMINATIONS

The Council of the Faculty of Arts will make arrangements whenever possible to allow a candidate who is teaching in Ontario to take his examination in his own locality.

## SUBJECTS OFFERED, 1927

*First Year; French.*

*Second Year; History, History of Philosophy, Political Economy, Chemistry, Zoology.*

*Third Year; History, French, Mathematics, History of Philosophy, Zoology, Chemistry.*

*Fourth Year; History, History of Philosophy, Zoology, Chemistry, and any other subject for which a reasonable number of applications is received.*

# COURSES OF INSTRUCTION

## FIRST YEAR

### FRENCH

Grammar; dictation; translation from English into French; translation at sight from modern French.

## SECOND YEAR

### HISTORY

The History of Canada: from the age of discovery to the present day.

The History of Canada: the age of discovery; the French explorers and the fur trade; society and government in New France; the struggle for supremacy of France and Britain; early British rule in Canada; the Loyalist migration and the English-speaking settlements; rebellion leading to political union; the federation of Canada; the expansion to the Pacific; growth towards nationhood.

Books: FISKE, *The Discovery of America*, 2 volumes; the works of FRANCIS PARKMAN; MUNRO, *The Crusaders of New France*; WRONG, *The Conquest of New France* (Chronicles of America), *The Fall of Canada*; SKELTON, *The Canadian Dominion* (Chronicles of America); EGERTON, *Canada, 1763-1921*; LORD DURHAM'S *Report* (ed. Lucas); KENNEDY, *The Constitution of Canada, Documents of the Canadian Constitution*; and biographical study from the series, "The Chronicles of Canada", or "The Makers of Canada", especially Dorchester, Sydenham, Macdonald and Laurier.

The History of the United States: from the Colonial Period to the present day.

The History of the United States: the Colonial Period; the American Revolution; the framing of the federal constitution; territorial expansion; the Civil War; the United States as a great power.

Books: ADAMS, *Founding of New England, Revolutionary New England*; FORMAN, *History of the American People*; HARLOW, *Growth of the United States*; LECKY, *The American Revolution*; EGERTON, *The American Revolution*; FISKE, *The American Revolution*, 2 volumes; VAN TYNE, *Loyalists in the American Revolution*; WRONG, *Washington and his Comrades in Arms* (Chronicles of America); OLIVER, *Alexander Hamilton*; CHARNWOOD, *Abraham Lincoln*; WOOD, *Captains in the Civil War* (Chronicles of America); RHODES, *History of the Civil War, 1861-1865*; PAXSON, *Recent History of the United States*. For students reading more extensively the following are recommended: *The Cambridge Modern History*, Vol. VII; CHANNING, *History of the United States*; SIR G. TREVELYAN's volumes on *The American Revolution*; and for the causes and effects of the Civil War, J. F. RHODES, *History of the United States—1850-1898*.

#### POLITICAL ECONOMY

General Introduction to the Study of Economics. Elements of Economic Theory, Sketch of Economic History, and of important social changes and movements. Books recommended; TAUSSIG, *Principles of Political Economy*; CARVER, *The Distribution of Wealth*; ROBERTSON, *Control of Industry*; WITHERS, *Meaning of Money*.

#### HISTORY OF PHILOSOPHY

History of the problems of Philosophy, with special reference to (a) the Greek period (Thales to Plato) and the Stoics; (b) the origins of modern Philosophy in the Seventeenth Century.

Texts: Plato, *Republic*; LOCKE, *Essay on the Human Understanding*, Books ii and iv. Supplementary reading is prescribed in the course of instruction.

#### ZOOLOGY

An elementary course on the general structure of the animal body, its organs and tissues and their functions; classification and natural history of the common animals of Ontario, with special attention to principles of specialization, adaptation and distribution. The course is designed to give the student training in scientific method and also to afford assistance in the teaching of nature study.

#### CHEMISTRY

Elementary Chemistry: An introductory course in general chemistry with experimental illustrations.

Elementary quantitative chemistry (shorter course).

## THIRD YEAR

## HISTORY

Europe, 1763-1815. Political and social conditions in Europe, and especially in France, before 1789; the French philosophers; the failure of enlightened despotism. The beginning of the Revolution in France; the appeal to force; the reforms of the Constituent Assembly; the outbreak of war, the second revolution, and the fall of the throne; the Convention, the Jacobin government, and the Reign of Terror. The failure of the middle-class reaction 1794-99. The advent of Napoleon; the reorganization of France under the Consulate; the path to Empire and the conquest of Europe; Napoleonic statesmanship in Germany and Italy; the Continental System; the war of Liberation and the fall of Napoleon.

Books: LECKY, *England in the Eighteenth Century* (chapters on France); TOCQUEVILLE, *France before the Revolution*; TAINE, *Ancient Régime*; YOUNG, *Travels in France*; SOREL, *L'Europe et la Révolution Française*, vol. i; ACTON, *Lectures on the French Revolution*; MADELIN, *French Revolution*; AULARD, *French Revolution*; BARTHOU or WILLERT, *Mirabeau*; MADELIN, *Danton*; BELLOC, *Robespierre*; or MORLEY, *Robespierre* (in *Critical Miscellanies*); VANDAL, *L'Avènement de Bonaparte*; lives of Napoleon by FOURNIER, ROSE and FISHER; FISHER, *Bonapartism*; *Napoleonic Statesmanship in Germany*; *Cambridge Modern History*, Vols. VIII and IX.

British History, 1689-1815. The relations of England, Scotland and Ireland; the evolution of Cabinet government and of the Whig and Tory parties, with special reference to the work of Walpole, Chatham and the younger Pitt; British foreign and colonial policy; the long struggle with France, especially in the field of colonial enterprise; the loss of the American Colonies; society before and during the Industrial Revolution; the Methodist movement; the effects of the French Revolution on English life and thought.

Books: MUIR, *Short History of the British Commonwealth*; FLETCHER *Introductory History of England*, Vol. iii; TREVELYAN, *England under the Stuarts*; ROBERTSON, *England under the Hanoverians*; MACAULAY, *History of England*; *Essays*: LECKY, *England in the Eighteenth Century*; MORLEY, *Walpole*; *Burke*; WILLIAMS, *Chatham*; HOLLAND ROSE, *Pitt*; ROSEBERRY, *Pitt*; TREVELYAN, *Early Life of C. J. Fox*; COUPLAND, *Wilberforce*.

## FRENCH

(1) Standards of the classical age and the main ideas of the eighteenth century, studied in French literature from Malherbe to André Chénier. MORNET, *Histoire de la littérature et de la pensée françaises*; *French Prose of the XVIIIth Century* (ed. Warren); CORNEILLE, *Le Cid*; MOLIÈRE, *Le Misanthrope*, *Le Bourgeois Gentilhomme*; RACINE, *Andromaque*; LA FONTAINE, *Fables*; *Eighteenth Century French Readings* (ed. Schinz).

(2) Supplementary reading from the authors of the period, carried on under the direct supervision of the instructors, forms an essential part of this course.

(3) Composition; translation at sight from modern French.

#### MATHEMATICS

Differential and Integral Calculus: The elementary theory and applications.

HISTORY OF PHILOSOPHY (See Second Year)

CHEMISTRY (See Second Year)

ZOOLOGY (See Second Year)

#### FOURTH YEAR

##### HISTORY

The History of Europe, 1815-1914: a study of the national movements of the 19th century and their effect upon international relations. Special attention will be paid to: the settlement of Vienna and the Congress period; the revolutions of 1848; the age of Napoleon III and the foundation of the Third French Republic; the work of Cavour in Italy and of Bismarck in Germany; the growth of German imperialism and the resultant diplomatic upheaval; the modern history of the Near Eastern and Balkan problems; the causes of the Great War.

Books: LIPSON, *Europe in the Nineteenth Century*; A. PHILLIPS, *Modern Europe*; SEIGNOBOS, *Political History of Contemporary Europe*; FUETER, *World History, 1815-1920*; FYFFE, *History of Modern Europe*; GOOCH, *Modern Europe, 1878-1919*; *Cambridge Modern History*, Vols. X-XII; MOWAT, *History of European Diplomacy*. For France, BOURGEOIS, *Modern France*; GUEDALLA, *Napoleon III*; SIMPSON, *The Rise of Louis Napoleon*, *Louis Napoleon and the Recovery of France*; LOWES DICKINSON, *Revolution and Reaction in Modern France*; for Italy, STILLMAN, *Union of Italy*; BOLTON KING, *Mazzini*; ORSI, *Cavour*; for Germany, ROBERTSON, *Bismarck*; DAWSON, *The German Empire*; GOOCH, *Germany*; for Austria-Hungary, WICKHAM-STEED, *The Hapsburg Monarchy*.

The History of Great Britain, 1815-1914. The Industrial Revolution and the social history of industrialized England; reform in central and local government; the Benthamite philosophy; Free Trade; the Manchester School; Liberalism; the working class movements, *e.g.*, Chartism and the later Socialism; Trade Unionism; the advent of democracy and its influence on policy and institutions; the history of political parties; the development of British "Imperial" opinion; the Irish question; domestic



politics under Gladstone, Disraeli, Salisbury; foreign policy from Castlereagh to Sir Edward Grey.

Books: TREVELYAN, *British History in the Nineteenth Century*; MUIR, *Short History of the British Commonwealth*, Vol. II; EGERTON, *History of British Foreign Policy*; Cambridge *History of British Foreign Policy*; DICEY, *Law and Opinion in England*. Biographies: TEMPERLEY, *Canning*; WALLAS, *Francis Place*; COLE, *Cobbett*; TREVELYAN, *Grey of Reform Bill*, *Bright*; MONYPENNY AND BECKLE, *Disraeli*; MORLEY, *Gladstone*; STRACHEY, *Queen Victoria*; GREY OF FALLODON, *Twenty-five Years*.

The Institutions of the Modern British Empire: a comparative study. The governments of Great Britain, Canada and the other Dominions, India and the Crown Colonies; the chief constitutional problems of the British Commonwealth.

Books: KEITH, *The Constitution, Administration, and Laws of the Empire*; DICEY, *Law of the Constitution*; ANSON, *Law and Custom of the Constitution*; LOWELL, *Government of England*; KEITH, *Dominion Home Rule*; SWIFT McNEILL, *Constitution of the Irish Free State*; ILBERT AND MESTON, *The New Constitution of India*.

HISTORY OF PHILOSOPHY (See Second Year)

CHEMISTRY (See Second Year)

ZOOLOGY (See Second Year)

## THE TEACHERS' COURSE

The Pass Course, according to the following scheme, is the basis of instruction:

First Year: English, Latin, Mathematics (Algebra and Geometry), French, History or Trigonometry, Science (one of Botany, Zoology, Chemistry, Physics), or one of Greek, German, Italian, Spanish.

The Teachers' Course provided by the University begins ordinarily in the Second Year and the candidates hitherto admitted have held for the most part Faculty Entrance, Upper School, Senior Leaving, or Honour Matriculation certificates.

Second Year: English or Mathematics I, French, Science, History, Psychology or Political Economy.

Third Year: English, French or Mathematics I, Science, History, Ethics or Political Economy.

Fourth Year: English, French or Mathematics I, Science, History, History of Philosophy or Political Economy.

The Science of the Second, Third, and Fourth Years may be selected from Botany, Zoology, Geology, Physics, Chemistry, and Astronomy, one for each year. These sciences are so arranged as to provide exactly the

same university credit and may be taken in any order. Only one science may be taken in one year. They will be offered in Summer Sessions and Teachers' Classes as follows:

Summer Session, 1927: Zoology or Chemistry.

Teachers' Classes—1927-28: Botany or Astronomy.

Teachers' Classes—1928-29: Geology or Physics.

A student who selects Mathematics, or Political Economy, or the philosophical group of subjects, must take the subject or group chosen throughout the three years, *i.e.*, the sequence provided in these subjects cannot be broken.

#### REGULATIONS GOVERNING THE TEACHERS' COURSE

1. This course is open to persons actually engaged in teaching and to such others as have been approved by the Council. In all cases application for admission must be made to the Registrar of the University through the Director of University Extension. Only under exceptional circumstances will a candidate be allowed to attend classes in more than three subjects during one session of the Teachers' Course.

2. A student proceeding to the degree shall on or before *October 1st* of each year submit a statement of the work which he proposes to take (a) in the Teachers' Classes or (b) under supervision preparatory to the Summer Session, and on or before *May 15th* of each year, a similar statement of the work he desires to take during the Summer Session.

3. A student will receive credit for each subject in which he secures fifty per cent.

4. A student will not receive credit for a subject of a higher year until he has passed the examination of the lower year in the same subject. He may, however, be a candidate for examination in the work of two successive years in the same subject.

5. A student who has not been granted complete First Year standing may not enter upon the work of the Third Year, nor a student who has not been granted complete Second Year standing, upon the work of the Fourth Year.

6. Pursuant to Section 124 of the Revised Statutes of Ontario, 1913, in the case of a candidate for the degree of Bachelor of Arts, registered in the Teachers' Course, enrolment in one of the Arts Colleges shall not be necessary.

7. Instruction during the regular session will be given as far as possible to meet the convenience of the members of the classes residing in Toronto and its immediate vicinity. Instruction during the regular session is also provided, as far as possible, in other centres in the Province where a sufficient number of teachers or others employed during the day, may be enrolled.

8. The Summer Session is held during July and a part of August, and is open (a) to persons engaged in teaching, (b) to such others as have

been approved by the Council of the Faculty of Arts, and (c) to regular students who have failed to receive credit in one or at most two subjects of the Pass Course, provided always that instruction in such subjects has been arranged for at that Summer Session.

9. The work of the Second, Third, and Fourth Years of the Teachers' Course may be covered in five years and will involve (a) attendance on Teachers' Classes during four regular sessions or (b) attendance for four Summer Sessions and supervision during four regular sessions.

10. Instead of completing his course under this plan a candidate proceeding to the degree is advised to attend the regular courses of instruction in the Fourth Year, in which case the fourth Summer Session is not compulsory. Students are advised to acquaint themselves with the regulations of the Department of Education respecting High School Assistants' certificates.

11. A candidate will not be allowed to present himself for examination in any subject until he has attended one Summer Session and has had supervision of his work during one academic year, or until he has attended Teachers' Classes in that subject during one regular session or until he has completed the necessary minimum of attendance. See Section 9.

12. Supervision of work should precede the Summer Session but, as such supervision may follow class instruction, assistance in the work of either group of the Second Year or of the Third Year will be provided.

13. When a candidate fails to secure credit in a Pass subject, other than English or a Science of the Second, Third and Fourth Years, because of a deficiency in term marks he must either (1) earn a new term mark under conditions to be determined by the staff in the subject, and repeat the examination, or (2) make up the deficiency of term marks by obtaining a corresponding increase in his examination marks.

14. A candidate whose term work in English is deficient, or who obtains less than fifty per cent. of the marks assigned to the term work in any one of the Sciences of the Second, Third and Fourth Years must obtain a satisfactory term mark under conditions to be determined by the staff concerned, and subsequently must pass a supplemental examination in the subject.

When students fail in a subject, they should make sure of the content of that subject before writing the examination a second time. The curriculum may change at any time and the only safe guide is the Calendar for the current academic year.

## COURSES FOR DEGREES IN PEDAGOGY

The Ontario College of Education offers courses of instruction for the degrees in Pedagogy during the regular College Sessions and during Summer Sessions.

## DEGREE OF BACHELOR OF PEDAGOGY (B.PAED.)

The degree of Bachelor of Pedagogy (B.Paed.) will be awarded under the following conditions:

1. The candidate shall hold an approved degree in Arts, Science, Agriculture, Engineering, or Commerce.

2. The candidate shall be in attendance at the Ontario College of Education during two regular College Sessions or three Summer Sessions. A High School Assistant's, or First Class, or Second Class certificate valid in Ontario or a regular course in an approved training school for teachers will be accepted in lieu of attendance during one of these regular Sessions or one of the Summer Sessions

3. The course shall consist of three subjects to be taken in any order and to be selected from the following:

Group A.—Science of Education, Educational Psychology.

Group B.—History of Education, Educational Administration.

Not more than two of these subjects shall be taken during a regular Session and not more than one during a Summer Session.

Candidates who, under Section 2 above, are exempted from attendance during one regular Session or one Summer Session will be exempted also from the instruction and examination in one of the three subjects, provided that the degree be awarded only to candidates who have taken the instruction and examinations in at least one subject in each of the two groups of subjects.

4. The examinations shall be held in May at the University of Toronto or in any other locality in the Province chosen by the candidate and approved by the Senate and under a presiding examiner appointed by the Senate, provided the candidate thereat defray the cost of the local examinations. The candidate shall send notice not later than the 15th day of March of his intention to take the examinations and of the locality he has chosen for such examinations.

5. The fee for registration is \$5. The fee for the Summer Session is \$10, the fee for the regular Session, which shall include the examination and library fees, is \$25. The fee for examination is \$3 for each subject. The fee for the degree is \$20. All fees shall be paid to the Bursar with the application for registration or examination, as the case may be.

6. The standard for a Pass degree shall be 60 per cent. of the marks assigned to each subject. The candidate who obtains 60 per cent. of the marks of each subject, and 60 per cent. of the aggregate of marks, shall be awarded a degree with Second Class Honours. The candidate who obtains 60 per cent. of the marks of each subject and 75 per cent. of the aggregate of marks shall be awarded a degree with First Class Honours. On the report of the instructors concerned, a maximum of 40 per cent. of the marks in any subject may be assigned to the term work of the candidate.

### 7. Subjects of Instruction and Examination:

(a) The Science of Education, including a study of the philosophical, ethical, and sociological bases of education. (Two papers.)

(b) Educational Psychology. (Two papers.)

(c) The History of Education in Western Europe and North America in modern times, with special reference to Ontario, Great Britain, and the United States. (Two papers.)

(d) Educational Administration in Great Britain, the United States, France, and Germany, with special reference to the administration and organization of education in Ontario. (Two papers.)

### DEGREE OF DOCTOR OF PEDAGOGY (D.PAED.)

The degree of Doctor of Pedagogy (D.Paed.) will be awarded by the School of Graduate Studies under the following conditions:

1. The candidate shall hold an approved degree in Arts or Science or in the applied sciences of Agriculture, Engineering, or Commerce.

2. The candidate shall be in attendance at the Ontario College of Education during three regular College Sessions or four Summer Sessions. A High School Assistant's, First Class, or Second Class certificate valid in Ontario, or a regular Course in an approved training school for teachers will be accepted in lieu of the attendance during one of these regular Sessions or one of the Summer Sessions.

3. The Course shall consist of the four subjects and a thesis as defined in Sections 5 and 7. The subjects may be taken in any order, provided that not more than two be taken in any regular Session and not more than one in any Summer Session. Candidates who, under Section 2, are exempted from attendance during one regular Session or one Summer Session will be exempted also from the instruction and examination in one of the four subjects.

4. The examinations shall be held at such times and under such conditions as to date of application, place of examination, percentages, etc., as obtain with the Bachelor's degree.

5. The candidate, after passing the prescribed examinations, shall also submit on or before March 1st a thesis on some educational topic selected with the approval of the Ontario College of Education. In valuing this thesis literary excellence, as well as the discussion of the subject, will be taken into account. After the examiners have reported in favour of the candidate's examinations and thesis, and before the degree of D.Paed. is conferred, the candidate shall furnish the Secretary of the School of Graduate Studies with twenty-five copies of the thesis.

6. The fee for registration, if not already registered in the B.Paed. Courses, is \$5. The fee for the Summer Session is \$10; that for the regular Session, which shall include the examination and library fees, \$25. The fee for examination is \$3 for each subject. The fee for the degree is \$25. All fees shall be paid to the Bursar with the application.

7. Subjects of Instruction and Examination:

(a) The Science of Education, including a study of the philosophical, ethical, and sociological bases of education. (Two papers.)

(b) Educational Psychology. (Two papers.)

(c) The History of Education in Western Europe and North America in modern times, with special reference to Ontario, Great Britain, and the United States. (Two papers.)

(d) Educational Administration in Great Britain, the United States, France, and Germany, with special reference to the administration and organization of education in Ontario. (Two papers.)



UNIVERSITY COLLEGE

## UNIVERSITY COLLEGE

University College is, since the Federation Act of 1887, the complement, in the system of higher education provided by the State, of the University of Toronto. The State furnishes through University College instruction in those departments of the Arts course in which it does not furnish instruction through the University. The departments are Greek, Latin, Ancient History, English, French, German, Oriental Languages, and Ethics.

*Principal*.....MAURICE HUTTON, M.A., LL.D.  
*Registrar*.....G. OSWALD SMITH, M.A.  
*Dean of Women and Head of the Women's Union.* MRS. M. M. KIRKWOOD,  
Ph.D.  
*Dean in Residence* .. .. .C. N. COCHRANE, M.A.

## UNIVERSITY COLLEGE COUNCIL

### THE PRINCIPAL.

PROFESSORS CAMERON, FAIRLEY, GREEN, JEANNERET, MEEK, MILNER,  
NEEDLER, NORWOOD, TAYLOR, TRACY, WALLACE, WILL.

ASSOCIATE PROFESSORS ALLEN, BROWN, CLAWSON, COCHRANE, DALE,  
DAVIS, DUFF, DE CHAMF, HAMILTON, HEDMAN, KNOX, MACDONALD,  
OWEN, SMITH.

ASSISTANT PROFESSORS ANDISON, HOLT, IRWIN, McANDREW, McKELLAR.

## ENROLMENT OF STUDENTS

The conditions precedent to enrolment in University College are determined by the Council of the College. Every student of the College must either be an undergraduate of the University, or, if he be an occasional student, must satisfy the College Council that he has a sufficient knowledge of the subjects in which he proposes to attend College lectures to do so with advantage.

## DISCIPLINE

The College has full control of its students so far as concerns their attendance upon lectures in the courses provided by the College, and their admission to the University examinations. No student of the College will be received by the University for examination without a certificate from the College that he has complied with its regulations.

## RELIGIOUS KNOWLEDGE

No student will be allowed to take a Religious Knowledge option in any other than University College without the consent of the College Council. Each student who wishes to take a course in Religious Knowledge outside University College must make formal application to the Principal on or before October 25th, stating what course he desires to take,



for what subject the course is an option, in which College the applicant proposes to take this course and for what reason he wishes to take it outside University College.

#### LODGING AND BOARD

Lodging and board are obtainable in private boarding houses within convenient distance of the University, or rooms may be rented and board obtained separately. A list of accredited boarding-houses is kept by the Secretary of the University Student Christian Association in Hart House, and by the Head of the University College Women's Union. Students are recommended to consult them with reference to the selection of suitable accommodation. Board may also be obtained at moderate rates at Hart House, and for Women at the Women's Union.

For University and College Residences see pages 162, 163, 164.

#### STUDENT SOCIETIES, ETC.

Various societies and associations have been organized in the College for the promotion of Christian effort, social intercourse, literary and scientific activity, and athletics.

The College has a branch of the University Student Christian Association, which has its quarters in Hart House.

The women students also have a College branch of the Student Christian Association.

The University College Literary and Athletic Society is the authorized administrative body of the men students of the College, for which a compulsory fee of \$2.00 a year is collected from each member. This Society officially represents the men students in dealing with the University and College governing bodies. It directs the social and athletic activities of the men students. It also holds debates and literary programmes.

The Women Undergraduates' Association holds a similar position in relation to the women students, a compulsory fee of \$1.00 a year being collected from each member.

A joint Council representing these two bodies deals with matters of common interest to all the students.

The men of each Year have their own elected executive. The Presidents of the four Years are *ex officio* Councillors on the executive of the Literary and Athletic Society.

The women students have similar Year executives.

There is also a Women's Literary Society of the College.

The Players' Guild is an organization devoted to the study of the drama and is open to all students of the College.

Besides the above there are several associations connected with the College departments, such as the Classical Association, the Modern Language Club, etc. There are similar societies connected with the University departments, to which members of the College are eligible.

## REGULATIONS RELATING TO STUDENTS, TERMS AND EXAMINATIONS

1. Students entering University College are required to produce satisfactory certificates of moral character and previous good conduct.

2. No student will be enrolled in any year, or be allowed to continue in attendance, whose presence for any cause is deemed by the Council to be prejudicial to the interests of the College.

3. Students are required to attend the courses of instruction and examinations in all subjects prescribed for students of their respective standing, and no student will be permitted to remain in the College who persistently neglects academic work.

4. The certificate required for admission to the University examinations will not be granted to students who have been reported to the Council for not conforming to the College regulations, or for improper conduct of any kind.

5. Men and women students, unless members of the same family, are not permitted to reside in the same lodging-houses.

6. All women undergraduates in University College are required to register with the Head of the Union at the beginning of term. Her directions as to conduct are to be observed. Women undergraduates who are away from home and not in a College Residence must have their boarding-houses approved by her.

7. All interference on the part of any student with the personal liberty of another, by arresting him, or summoning him to appear before any unauthorized tribunal of students, or otherwise subjecting him to any indignity or personal violence, is forbidden by the Council. Any student convicted of participation in such proceedings will forfeit the certificate required for admission to the University examinations, and will render himself liable to expulsion from the College.

8. A student who is under suspension, or who has been expelled from the College or University, will not be admitted to the University buildings or grounds.

9. The constitution of every College society or association of students and all amendments to any such constitution, must be submitted for approval to the College Council. All programmes of such societies or associations must, before publication, receive the sanction of the Council. Permission to invite any person not a member of the Faculty of University College to preside at or address a meeting of any society or association is subject to the consent of the Council. Societies and associations are required to confine themselves to the objects laid down in their constitution. Each Society composed wholly or in part of students registered in University College shall supply the Principal with a copy of its constitution, and the names and addresses of its officers.

10. The name of the College is not to be used in connection with a publication of any kind without the permission of the College Council.

11. Certificates of attendance on lectures in any department during an

academic year may be given to occasional students who have been regular in their attendance, and who have also passed the examinations in such department.

12. (a) The Council of University College will sanction dancing only in buildings the use of which it has authorized.

(b) In every instance where dancing forms any part of the programme a complete list of the participants who are not University students, with their addresses, shall be supplied by the President of the Society.

(c) For each evening meeting attended by both men and women students chaperones must be appointed, the names and addresses of whom shall be submitted one week in advance to Mrs. Kirkwood, 79 St. George Street.

(d) Dancing shall cease by 11 o'clock p.m., unless special permission has been obtained for its continuance beyond that hour.

(e) When dancing forms part of a regular meeting of a Society, it shall be limited to the final half-hour.

(f) Applications for permission to hold social gatherings are to be addressed in writing to the Convener of the Committee on Social Activities, University College.

# AWARDED BY THE COUNCIL OF UNIVERSITY COLLEGE, JUNE, 1928

## PRIZES

The Squair French Prose Prize . . . . . Miss I. G. Balthazard  
The Toronto Alumnae Prize in English Composition of the  
Second Year . . . . . Miss L. R. Cornish  
The Tracy Prize, for Ethics, Fourth Year . . . . . No award

## MEDALS

The Governor-General's Silver Medal for Modern Languages. E. K. Brown  
The McCaul Gold Medal, in Classics . . . . . P. F. McCullagh  
The Breuls Gold Medal, in Economics . . . . . J. J. Robinette

## SCHOLARSHIPS

The McCaul, for Classics (Junior Matriculation) . . . . . Miss C. T. Shiell  
The Moss, for Classics (First Year) . . . . . J. M. Cowan  
The Edward Blake, for Moderns (First Year) . . . . . Miss M. H. Lake  
The George Brown, for Moderns (Second Year) . . . . . Miss I. G. Balthazard  
The William Mulock, for Classics (Second Year) . . . . . M. St. A. Woodside  
The Moss, for Classics (Third Year) . . . . . Miss H. I. MacTaggart  
The Julius Rossin, for Moderns (Third Year) . . . . . H. Steinhauer  
The John Macdonald, for Philosophy (Third Year) . . . . . No award





VICTORIA COLLEGE

## VICTORIA COLLEGE

Victoria College was founded by resolution of the Conference of the Methodist Church in Canada, held in Kingston in August, 1830. The institution was opened for students at Cobourg on the 18th of June, 1836, with the Rev. Matthew Richey, M.A., as Principal. On the 12th of October, 1836, letters patent were issued by His Majesty King William IV, incorporating the institution as a seminary of learning for the Province of Upper Canada, under the name of "Upper Canada Academy".

In 1841 the Parliament of the United Provinces of Upper and Lower Canada, being now first constituted by Acts of the Imperial Parliament with power to grant such a charter, at its first session held in the city of Kingston, passed an Act extending the charter of the Academy under the name and style of "Victoria College, with power and authority to confer degrees of Bachelor, Master and Doctor of the various Arts and Faculties", which Act was assented to by the Governor-General on the 27th of August, 1841.

On the 21st of October, 1841, the Rev. Egerton Ryerson, having been appointed principal, opened the first college session under the enlarged charter.

In the year 1844 the Rev. A. McNabb, D.D., succeeded the Rev. Dr. Ryerson as Principal, and occupied the office until 1849. At the close of his term the number of students in the College was 140.

In 1850 the Rev. S. S. Nelles, M.A., was appointed Principal, and addressed himself to the task of organizing and enlarging the College to the status and work of a University. In the year 1854-55 the Faculty of Medicine was added and established in Toronto. In 1860 the Faculty of Law was added, and in 1871 the Faculty of Theology.

In the year 1883-84 a Commission, appointed by the General Conference of the Methodist Church, arranged for the consolidation of Albert College, Belleville, with Victoria College, Cobourg, and legal effect was given to this consolidation by Act of the Legislature of Ontario, 47 Vict., chap. 93.

The corporate name was by this Act changed to "Victoria University". The government of the University was vested in a Board of Regents, Chancellor, Vice-Chancellor and Senate. To these bodies was given power to affiliate outlying colleges, and full university powers in all faculties were continued. The Rev. S. S. Nelles, D.D., LL.D., as President, was *ex officio* first Chancellor, and William Kerr, M.A., LL.D., K.C., Senator, was elected first Vice-Chancellor.

Under the provisions of the present charter the following colleges are affiliated in Arts with Victoria University:—Albert College, Belleville; the Ontario Ladies' College, Whitby; Alma College, St. Thomas.

In 1887, the Rev. S. S. Nelles, D.D., LL.D., died, and the Rev. N. Burwash, S.T.D., LL.D., was appointed President and Chancellor.

On the 12th of November, 1890, under the provisions of the Revised Statutes of Ontario, chap. 230, and the Acts amending the same, Victoria University was, by proclamation of the Lieutenant-Governor, federated with the University of Toronto.

On the first of October, 1892, the Faculty of Victoria College began work in the present Main Building in Queen's Park, Toronto, and the federation of the Universities was practically consummated. The Faculty of Arts then assumed the work and relation of a College in the University of Toronto, providing instruction in all subjects assigned by the Federation Act to University College. In other subjects the students of Victoria College attend the lectures and laboratory practice of the University of Toronto, and receive their degrees under the statutory regulations of its Senate.

By the provisions of the Federation Act of 1887 the President of Victoria College, a representative of the Senate of Victoria College, and five representatives of the graduates in Arts, are members of the Senate of the University of Toronto, and the graduates and undergraduates of Victoria College are granted the same standing and privileges in the University of Toronto. By the provisions of the University Act of 1906, three members of the Arts Faculty of Victoria, chosen by that body, are sent as additional representatives to the Senate of the University of Toronto, and all the permanent members of the Arts Staff of Victoria as well as one member of the theological staff chosen by that Faculty are members of the Council of the Faculty of Arts of the University of Toronto.

At Federation five hundred and seventy-seven graduates of Victoria College were admitted to standing and privileges of the degree of B.A. in the University of Toronto; two hundred and thirty-one to those of M.A.; nine hundred and sixty-three to those of M.D.; one hundred and twenty-five to those of LL.B.; and forty to those of LL.D.

By the University Act of 1901 the electoral body in Convocation of Victoria College was made permanent, and was enlarged to include all graduates in Arts of the University of Toronto since 1892 who at graduation were enrolled in Victoria College.

The electoral body of Victoria College in the Convocation of the University of Toronto now consists of about 2670 graduates in Arts, besides the graduates in Law and Medicine, who form one body with those of the University of Toronto.

In 1913, the Rev. N. Burwash, S.T.D., LL.D., retired from the position of President and Chancellor and the Rev. R. P. Bowles, M.A., D.D., LL.D., was appointed in his stead.

The following Benefactions have been given to Victoria University for the endowment of chairs and erection of buildings:—

Mr. and Mrs. Edward Jackson for endowment of chair, \$30,000.

Wm. Gooderham, Esq., for building and endowment, \$200,000.

The Honourable Geo. A. Cox and Mrs. Cox, for endowment of two chairs, \$100,000.

Hart A. Massey, Esq., for building and endowments, \$960,000.

The Honourable John Macdonald, for building for federation purposes, \$25,000.

W. E. H. Massey, Esq., for endowment, three hundred shares of Massey-Harris stock.

Sir Joseph Flavelle, Bart., LL.D., for endowment, \$30,000.

Andrew Carnegie, Esq., for library building, \$50,000.

Cyrus A. Birge, Esq., for library endowment, \$50,000.

Dr. Hamilton Fisk Biggar, for scholarship, bursaries and general endowment, \$50,000.

Mrs. Lillian Massey Treble for general endowment, the residue of her estate valued at approximately \$1,380,000.

From these and other sources the following Chairs have been endowed:—

The Edward Jackson Chair in Biblical and Systematic Theology.

The Ryerson Chair in Ethics and Evidences of Christianity.

The Nelles Chair in Ancient History.

The William Gooderham Chair in English Literature.

The Eliza Gooderham Chair in French Literature.

The H. A. Massey Chair in the English Bible.

The Eliza Phelps Massey Chair in Old Testament Exegesis.

The Geo. A. Cox Chair in New Testament Exegesis.

The Margaret Cox Chair in Homiletics and Pastoral Theology.

The W. E. H. Massey Chair in Greek Language and Philosophy.

The J. W. Flavelle Chair in Hebrew.

A special endowment for the Presidency of the College.

The John Macdonald Chair in Latin.

The buildings, library, furniture and grounds of Victoria College are now valued at \$1,350,454.78, and the endowment and prize fund totals \$2,574,705.47.



GOVERNMENT OF VICTORIA COLLEGE

BOARD OF REGENTS

*Representatives of the General Conference:*

REV. S. D. CHOWN, D.D., LL.D.  
 REV. J. W. GRAHAM, B.A., D.D., LL.D.  
 REV. W. L. HILES, B.A.  
 REV. A. J. IRWIN, B.A., B.D., D.D.  
 REV. W. J. SMITH, B.A.  
 REV. TREVOR H. DAVIES, D.D.  
 REV. R. N. BURNS, B.A., D.D.  
 REV. W. G. CLARKE, B.A.  
 A. E. AMES, ESQ.  
 C. D. MASSEY, ESQ., LL.D. (*ob.*).  
 H. H. FUDGER, ESQ.  
 HON. N. W. ROWELL, LL.D., K.C.

*Representatives of the Alumni:*

HON. J. J. MACLAREN, M.A., LL.D., D.C.L., *Vice-Chancellor.* (*ob.*).  
 MRS. G. J. BLEWETT, B.A.  
 G. H. LOCKE, M.A.  
 REV. C. W. BISHOP, B.A.  
 F. N. G. STARR, C.B.E., M.D., C.M., F.A.C.S.  
 PROFESSOR C. T. CURRELLY, M.A.  
 MRS. R. G. DINGMAN, B.A.  
 J. R. L. STARR, B.A., LL.B., K.C.

*Co-opted by General Conference and Alumni Representatives:*

REV. R. P. BOWLES, M.A., D.D., LL.D., *Chancellor.*  
 W. E. RUNDLE, ESQ.  
 E. R. WOOD, ESQ.  
 G. H. WOOD, ESQ.  
 F. H. DEACON, ESQ.  
 A. R. FORD, B.A.  
 LADY FLAVELLE  
 H. C. COX, ESQ.

## THE SENATE

REV. R. P. BOWLES, M.A., D.D., LL.D., *Chancellor*.  
 HON. J. J. MACLAREN, M.A., LL.D., D.C.L., *Vice-Chancellor*. (*ob.*)  
 REV. S. D. CHOWN, D.D., *General Superintendent of the Methodist Church*  
 A. P. COLEMAN, M.A., Ph.D. (Bresl.) LL.D., F.R.S., *Honorary Professor*.  
 PROFESSORS OF THE FACULTY OF ARTS.  
 PROFESSORS OF THE FACULTY OF THEOLOGY.  
 MEMBERS OF THE BOARD OF REGENTS.

*Representative of Albert College:*

F. W. MERCHANT, B.A., D.PAED.

*Representative of the Ontario Ladies' College:*

REV. F. S. FAREWELL, B.A.

*Representative of Alma College:*

REV. P. S. DOBSON, M.A., D.D.

*Representatives of the Alumni:*

REV. W. B. CREIGHTON, B.A., D.D.  
 H. W. GUNDY, B.A.  
 REV. J. H. ARNUP, B.A., D.D.  
 H. W. AIKINS, B.A., M.D.  
 MRS. G. H. DUFF, B.A.  
 MISS E. F. ADAMS, B.A.  
 F. H. CLARKE, B.A.  
 F. C. COLBECK, B.A.

## ADMINISTRATIVE OFFICIALS

*President*.....REV. R. P. BOWLES, M.A., D.D., LL.D.  
*Dean of the Faculty of Arts*.....N. W. DEWITT, B.A., Ph.D.  
*Dean of the Faculty of Theology*.....REV. J. F. McLAUGHLIN, B.A., D.D.  
*Registrar*.....C. E. AUGER, B.A.  
*Librarian*.....REV. F. LOUIS BARBER, M.A., Ph.D.  
*Bursar*.....REV. F. LOUIS BARBER, M.A., Ph.D.  
*Accountant*.....W. J. LITTLE, B.A.  
*Secretary of the Faculty*.....N. W. DEWITT, B.A., Ph.D.  
*Secretary of the Faculty of Theology*.....REV. W. A. POTTER, M.A., B.D.  
*Honorary Dean of Residence*.....HON. VINCENT MASSEY, M.A.  
*Dean of Women Students*.....MISS M. E. T. ADDISON, B.A.  
*Treasurer*.....W. E. RUNDLE, Esq.

GENERAL REGULATIONS AND ANNOUNCEMENTS  
FOR STUDENTS IN ARTS

## ADMISSION

Students are admitted to registration in the Faculty of Arts on having passed the Matriculation examination prescribed by the University of Toronto, or on giving the Faculty satisfactory evidence of their ability to pursue the course of study proposed. They are required to observe the general regulations of the University of Toronto and of Victoria College in regard to attendance on lectures and examinations.

## EXAMINATIONS

No student may present himself for any University examination subsequent to matriculation without having complied with all the requirements of his college affecting his admission to such examination.

## OCCASIONAL STUDENTS

Occasional students may be admitted to lectures on application.

Certificates of attendance on lectures in any department during an academic year may be given to occasional students who have been regular in their attendance and who have passed the examinations in such department.

## TERMS

The term will not be allowed to students who have been reported to the President by any Professor as neglecting to attend the required lectures, or who have not conformed to the statutes and regulations of the College.

## INSTRUCTION

Instruction in the various subjects of the Arts course is given by the Arts Faculty of the University of Toronto and the Arts Faculty of Victoria College. Instruction in the Religious Knowledge options is given by the Theological Faculty of Victoria College.

## COLLEGE EXAMINATIONS

Students are required to attend all examinations prescribed by the Professors and Lecturers in their departments.

Prizes and honours are awarded on the recommendation of the Professors and Lecturers, in accordance with the requirements prescribed by them in their several departments.

## FEES

The fees required to be paid by students enrolled in Victoria College are those prescribed by the Governors of the University of Toronto. Enrolment fees are paid to the Accountant of the College; all other fees are paid to the Bursar of the University of Toronto.

## DISCIPLINE

All students enrolled in Victoria College are subject to the regulations as to discipline prescribed by the Council of the Faculty of Arts of the University of Toronto.

Students are required to attend the lectures, as well as the examinations on all subjects necessary for students of their course and standing. Compliance with this rule will be required as a condition of admission to examination by the University unless dispensation has been obtained.

All interference with the personal liberty of the student, by arresting him, or summoning him to appear before any unauthorized tribunal of students, or otherwise subjecting him to any indignity or personal violence is forbidden by the Faculty. Any student convicted of participation in such proceedings will forfeit the certificate required for admission to the University examinations, and will render himself liable to expulsion from the College.

## RELIGIOUS SERVICES

Morning prayers are held daily except Saturday and Sunday in the Chapel, at which all students are expected to be present. Other religious services will be held at suitable times, to which all students are cordially invited.

## LIBRARIES, MUSEUMS, ETC.

The students of Victoria College, besides having the use of the University of Toronto Library and the various Laboratories of the University, have free access to the Victoria University Library, which consists of a working collection of 30,000 bound volumes on the English, Latin, Greek, French and German languages and literatures, History, Philosophy and the various departments of Theology.

The College has loaned to the Royal Ontario Museum its mineralogical palaeontological and biological collections, as well as its collection of Egyptian and Indian relics.

## STUDENTS NOT IN RESIDENCE

All students who do not reside in any one of the Residences or who do not reside with their parents or with such persons as their parents or guardians direct, are recommended to board and lodge in such houses as are approved by the President of the College. A carefully selected list of boarding-houses, where board and rooms may be obtained, is prepared each year by the Student Christian Association. Students will be expected to observe proper hours and to maintain the conduct of Christian ladies and gentlemen.

## THE RESIDENCE FOR MEN STUDENTS

The Residence buildings comprise one hundred and sixteen bed-sitting rooms, and in each house there is a Common-Room with a fire-place on the ground floor, as well as a bedroom and sitting-room for the Tutor in Residence. About fifteen bedrooms have fire-places, and in one house there are two suites, each consisting of a bedroom and a study.

The Hall, known as Burwash Hall, is capable of seating 200 persons at meals. Used as a hall for lectures, it will seat about 700.

All inquiries should be addressed to the Accountant, Victoria College, Toronto, from whom can be obtained further information.

## THE RESIDENCES FOR WOMEN STUDENTS

The Residences for Women Students, Annesley Hall, Wymilwood and other houses, furnish residence for one hundred and fifty-two women students of Victoria College.

Applications for rooms must be accompanied by a deposit fee of \$10, which will be refunded if the application is withdrawn before September first. Fees are payable half on the first of October and half on the first of February.

Further information may be obtained by writing to the Dean of Women Students, Annesley Hall, Queen's Park, Toronto.

## MEDALS, SCHOLARSHIPS, AND PRIZES, 1926

## FACULTY OF ARTS

Awarded by the Senate of the University of Toronto (those marked with an asterisk) and by the Senate of Victoria College.

## FOURTH YEAR

The Parkin Memorial Scholarship.....	C. M. Stewart
The Prince of Wales' Gold Medal (Pass Course) . . . . .	J. M. Deck
The J. J. MacLaren Gold Medal (Modern Languages) . . . . .	Miss A. E. Graydon
The S. H. Janes Silver Medal (Moderns) . . . . .	Miss M. E. Balkwill {
	Miss D. E. Elliott { (aeq.)
The Reginald Heber Manning Jolliffe Gold Medal (English) . . . . .	J. A. Irving
(ranked) . . . . .	awarded to Miss M. E. H. Adams
The S. H. Janes Silver Medal (English and History) . . . . .	Miss A. M. Tremaine
	(Miss M. E. H. Adams also ranked equal)
The E. J. Sanford Gold Medal (Philosophy) . . . . .	C. A. Baxter
The S. H. Janes Silver Medal (Philosophy) . . . . .	W. S. W. Breese
The Regents' Gold Medal (Philosophy, English or History) . . . . .	J. A. Irving
The Regents' Gold Medal (Mathematics and Physics, Div. I)	N. W. McCutcheon
The G. A. Cox Gold Medal in Science . . . . .	Miss D. F. Forward
The Regents' Gold Medal in Household Economics	Miss S. M. Hughson {
	Miss E. E. H. Jackson { (aeq.)
The S. H. Janes Silver Medal (Commerce and Finance—B.A.)	W. R. Junkin

## THIRD YEAR

*The Aikins Scholarship in English . . . . .	Miss D. J. McKay
*The A.A.S. Scholarship in Mathematics and Physics . . . . .	H. H. Blakeman
*The Daniel Wilson Scholarship in Biology . . . . .	Miss J. E. Millsap
The Hamilton Fisk Biggar Scholarship in Classics . . . . .	J. E. Liddy
The George Dennis Morse Scholarship in Moderns . . . . .	Miss E. F. Luke
The Hamilton Fisk Biggar Scholarship in English and History . . . . .	Miss D. J. McKay
The Reginald Heber Manning Jolliffe Scholarship in English . . . . .	Miss M. R. M. Dawes {
	Miss M. K. Hunt { (aeq.)
	Miss D. J. McKay {
The Hamilton Fisk Biggar Scholarship in Political Science . . . . .	W. T. G. Hackett

The Hamilton Fisk Biggar Scholarship in Philosophy (English or History) .....	D. J. Wilson
The Hamilton Fisk Biggar Scholarship in Chemistry.....	H. B. Collier
The Hamilton Fisk Biggar Scholarship in Household Economics .....	Miss M. E. Walton

#### SECOND YEAR

*The William Mulock Scholarship in Mathematics and Physics.....	A. W. Tucker
*The Edward Blake Scholarship in Physics.....	R. G. Hunter
*The Edward Blake Scholarship in Biological and Medical Sciences.....	C. G. Smith
The Hamilton Fisk Biggar Scholarship in Pass Course.....	Miss A. E. Fulton
The Hamilton Fisk Biggar Scholarship in Household Economics.....	Miss I. L. Courtice
The Essa Van Dusen Dafoe Scholarship in French.....	Miss M. E. Jones
The Webster Prize in Pass English.....	Miss A. E. Fulton

#### FIRST YEAR

The Robertson Scholarship in Classics. ....	S. H. Gould
The Hamilton Fisk Biggar Scholarship in Pass Course.....	C. E. Helwig
The Hamilton Fisk Biggar Scholarship in English and History.....	Miss A. M. Muckle
The Hamilton Fisk Biggar Scholarship in Moderns....	Miss E. M. Masson
The Hamilton Fisk Biggar Scholarship in Philosophy (English or History).....	J. R. M. Wilson
The Hamilton Fisk Biggar Scholarship in Household Economics.....	Miss J. E. Malcolm
The Class of 1902 Prize in Pass English.....	H. S. Langford

#### ALL THE YEARS

The Lincoln G. Hutton Scholarship.....	Miss M. E. H. Adams
The Lily Denton Keys Prize.....	Miss M. I. Creighton

#### MATRICULATION SCHOLARSHIPS

##### THE MOSES HENRY AIKINS SCHOLARSHIPS

##### Proficiency in Departments:

Classics .....	R. T. Burgess.....	Oakwood Collegiate Institute
Moderns.....	Miss G. S. Fuller.....	Riverdale Collegiate Institute
Mathematics....	N. M. Burns.....	University of Toronto Schools
Science.....	W. E. Ricker.....	North Bay Collegiate Institute

## General Proficiency:

J. R. A. Bright.....	Harbord Collegiate Institute
Miss M. E. Coleman.....	Hamilton Collegiate Institute
Miss M. E. Matthewson.....	} Hamilton Collegiate Institute Ridgeway High School
B. R. Power.....	
D. H. Strangways.....	} University of Toronto Schools Beeton High School
M. G. Wyatt.....	
	} Barrie Collegiate Institute
	Stratford Collegiate Institute

## THE HAMILTON FISK BIGGAR SCHOLARSHIP (SPECIAL PROFICIENCY)

The following candidates ranked in the order named:

Miss M. E. Coleman, D. H. Strangways, Miss M. E. Matthewson.  
The Scholarship is awarded by reversion to: N. J. DeWitt, University of Toronto Schools.

## THE FLAVELLE SCHOLARSHIP IN CLASSICS

Miss H. F. Wickett.....Lindsay Collegiate Institute

## THE W. E. H. MASSEY SCHOLARSHIP IN CLASSICS

Miss R. B. Brinkman.....Smith's Falls Collegiate Institute



## AFFILIATED COLLEGES

ALBERT COLLEGE

BELLEVILLE, ONT.

FOUNDED 1854

## FACULTY

THE REV. C. W. BISHOP, M.A., D.D., *Principal*.  
THE REV. E. N. BAKER, M.A., D.D., *Principal Emeritus*.  
ELLA GARDINER, B.A., *Registrar*.  
T. C. McMULLEN, M.A., PH.D., F.C.I.C., *Dean of Residence*.  
R. RICKARD, B.A., M.R.E.  
W. E. L. SMITH, M.A.  
A. S. H. HILL, B.A.  
M. W. McCUTCHEON, B.A.  
H. S. SHURTLEFF, B.A.  
V. P. HUNT, A.A.G.O., *Director of Department of Music*.  
S. M. ANGLIN, B.A.  
BESSIE HANDLEY, A.T.C.M.  
JESSIE TUITE, L.L.C.M., *Expression*.

## COURSES IN STUDY

- I. Collegiate Course, embodying elective undergraduate studies.
- II. Junior and Senior Matriculation in Arts, Engineering, Law, Medicine and Theology.
- III. Teachers' Course, to prepare for teachers' examinations.
- IV. Preliminary Course, as prescribed by the General Council of the United Church of Canada.
- V. Depts. of Religious Education.
- VI. Musical Course in Musical Academy, comprising Pianoforte Course, Organ Course, Post Graduate Course and Voice Culture.
- VII. Courses in Elocution, Physical Culture and Deportment.

## ALMA COLLEGE

ST. THOMAS, ONT.

OPENED 1881

## ADMINISTRATIVE OFFICERS

S. D. CHOWN, M.A., D.D., LL.D.	<i>President of Board.</i>
W. F. THOMAS	<i>Chairman of Executive.</i>
P. S. DOBSON, M.A. (Oxon.), D.D.	<i>Principal.</i>
CLARA M. BLEWETT, B.A.	<i>Dean of Residence.</i>
HARRIETT JOLLIFFE	<i>Registrar.</i>

## LITERARY DEPARTMENT

NINA J. YEOMANS	<i>Religious Education, English.</i>
P. S. DOBSON, M.A.	<i>Latin.</i>
VELMA CANNON, B.A.	<i>Mathematics, Science.</i>
MARGARET THOMSON	<i>Preparatory Studies.</i>
MRS. P. S. DOBSON, B.A.	<i>French, German.</i>
LOUISE ADDISON, B.A.	<i>History, English.</i>
GERTRUDE METZLER, B.A.	<i>French, Art.</i>

## MUSIC

T. MARTIN, <i>Director</i>	<i>Pianoforte, Concert Solos.</i>
G. C. CARRIE	<i>Choral, Vocal.</i>
T. H. NIXON	<i>Organ, Theory, Piano.</i>
HARRIETT B. JOLLIFFE, A.A.C.M.	<i>Pianoforte.</i>
CLETA FORD, A.T.C.M.	<i>Pianoforte.</i>
NANCY POOLE, L.R.A.M.	<i>Violin.</i>
MARGARET MACFIE, A.T.C.M.	<i>Pianoforte.</i>

## FINE ARTS

LILA TAYLOR	<i>Painting, Modelling and Sketching.</i>
S. M. MCKAY	<i>China Painting.</i>

## COMMERCIAL SCIENCE

MARY JOHNSON	<i>Bookkeeping, Phonography, Typewriting and Penmanship.</i>
--------------	--

ELOCUTION AND PHYSICAL EDUCATION

MAY BELLE ADAMS.....	<i>Reading, Expression.</i>
IVEAGH MUNRO.....	<i>Physical Education.</i>

HOUSEHOLD SCIENCE

MARGARET BROWN .....	<i>Cookery, Dietetics, Sewing.</i>
----------------------	------------------------------------

DIPLOMA COURSES

- (a) M.E.L., embracing two years General Course in Arts with options and additional subjects in Bible Study, English, etc.
- (b) Music (Piano, Organ, Voice or Violin ).
- (c) Fine Art.
- (d) Physical Education.
- (e) Commercial and Shorthand.
- (f) Home Economics.
- (g) Expression.
- (h) High School Graduation.





TRINITY COLLEGE

## TRINITY COLLEGE

### I. TRINITY COLLEGE, WITH RESIDENCE FOR MEN

REV. F. H. COSGRAVE, M.A., B.D., *Vice-Chancellor and Provost.*

REV. G. F. KINGSTON, M.A., PH.D., *Dean of Residence.*

J. N. WOODCOCK, M.A., *Registrar.*

W. A. KIRKWOOD, M.A., PH.D., *Dean of the Faculty of Arts.*

REV. F. H. COSGRAVE, M.A., B.D., *Dean of the Faculty of Divinity.*

R. E. L. KITTREDGE, A.M., *Librarian.*

REV. S. CHILDS, B.A., B.D., *Extension Secretary and Clerk of Convocation.*

SYDNEY H. JONES, ESQ., *Bursar and Secretary of Corporation.*

### II. ST. HILDA'S COLLEGE—RESIDENCE FOR WOMEN

MISS M. CARTWRIGHT, B.A., LL.D., *Principal and Dean of Women Students.*

SYDNEY H. JONES, ESQ., *Bursar.*

Trinity College, which entered into federation with the University of Toronto on the first day of October, 1904, was founded by the Honourable and Right Reverend John Strachan, D.D., LL.D., first Bishop of Toronto, one of the founders, and at one time President, of King's College. It was established, after the secularisation of King's College in 1850, for the purpose of combining religious instruction with a liberal education.

In 1851 Trinity College was incorporated by the Legislature of Canada. In 1852 a Royal Charter conferred upon it University powers, which were exercised in all Faculties down to 1904, under the style of the University of Trinity College. Since 1904 Trinity College has conferred degrees only in the Faculty of Divinity.

Religious instruction for all its students in Arts having been one of the chief reasons for the foundation of Trinity College, this still remains one of its distinguishing features, the federation agreement with the University of Toronto preserving this right in perpetuity to all students of Trinity College.

The women students attend lectures with the men, and reside in St. Hilda's College, which offers to women all the advantages which are offered to men by the residence of Trinity College. All the women students, resident and non-resident, come under the supervision of the Dean of Women Students, Miss M. Cartwright, B.A., LL.D., who is also Principal of St. Hilda's College.

## PRIZE LIST

## DIVINITY CLASS 1926

## FOURTH YEAR—

*General Proficiency*—A. Gardiner, M.A.*Dogmatic Theology*—J. A. M. Bell.

## THIRD YEAR—

*General Proficiency*—D. S. Catchpole, B.A.*Church History*—W. G. H. Swayne.

## BOTH YEARS—

*Greek Testament*—A. Gardiner, M.A.*Hebrew*—D. S. Catchpole, B.A.*Comparative Religion*—F. G. Nicholson } equal.  
E. J. G. Tucker }*Old Testament*—A. Gardiner, M.A.*New Testament*—C. G. Stone.*Patristics*—F. A. Smith, B.A.*Liturgics*—E. J. G. Tucker.*Sermon Prize*—A. G. Wakelin.

## MCDONALD PRIZES FOR BIBLE KNOWLEDGE—

1. A. Gardiner, M.A.

2. C. G. Stone.

3. D. S. Catchpole, B.A.

## MISSION STUDY PRIZE—

D. S. Catchpole, B.A.

## THEOLOGICAL SOCIETY PRIZES—

*Essay Prize*—H. N. Taylor.*Set Speakers*—1. C. A. Flook.

2. J. B. Bonathan.

## HAMILTON MEMORIAL PRIZE—

A. Gardiner, M.A.

## READING PRIZES—

*College Prize*—W. L. Smith.*Doolittle Prize* (for improvement)—J. R. Davies.*Osler Prizes*—1. J. R. Davies.

2. W. L. Smith.

3. J. Furlong

F. J. Nicholson } equal.

## SCHOLARSHIPS AWARDED 1926

## ARTS

## PRIZES—

- Prize for the Pass Course—Fourth Year—C. J. Frank.  
Italian Prize—Third Year—Miss H. M. H. Corrigan.

## MEDALS—

- The Governor-General's Silver Medal—C. J. Frank.  
The Governor-General's Bronze Medal—Miss M. M. Martin.

## SCHOLARSHIPS—

- The Third Alexander T. Fulton Scholarship—A. H. Sellers.  
Mental and Moral Philosophy—Third Year—W. L. Smith.  
Political Science—Third Year—E. M. Reid.  
War Memorial Scholarship—E. M. Reid.

## DIVINITY

- Jubilee Scholarship—Divinity (Senior)—D. S. Catchpole.  
Jubilee Scholarship—Divinity (Junior)—C. J. Frank.

## MATRICULATION SCHOLARSHIPS 1926

## UNIVERSITY SCHOLARSHIPS—

- The Second Edward Blake Moderns Proficiency—Miss S. A. M. Brett.  
The First Edward Blake Classics Departmental—by reversion—  
H. R. S. Ryan.  
Mr. Ryan also qualified for the Second Edward Blake Classics Proficiency and Third Edward Blake Moderns Proficiency.

## COLLEGE SCHOLARSHIPS—

- The Wellington Scholarship in Classics—H. R. S. Ryan, Port Hope H.S.  
The Bishop Strachan (English, History and Classics)—H. R. S. Ryan qualified. No award.  
The Dickson Scholarship in Modern Languages—Mr. H. R. S. Ryan qualified. Awarded by reversion to Miss S. A. M. Brett, Alliston H.S.  
The Dickson Scholarship (English, History, Latin, French)—Miss S. A. M. Brett and H. R. S. Ryan qualified. Awarded by reversion to Miss M. L. J. Dickinson, of Kenora H.S.  
The U.C.C.—Trinity—C. H. Little, Upper Canada College.  
The Leonard McLaughlin Scholarship—C. H. Little, Upper Canada College.



---

ST. MICHAEL'S COLLEGE

---

## ST. MICHAEL'S COLLEGE

St. Michael's College was founded in 1852, at the request of the Rt. Rev. Dr. de Charbonnel, then Bishop of Toronto. It was established for the purpose of combining religious instruction with a liberal education.

For a number of years it was granted state aid, in common with the other arts colleges of the Provinces. This came to an end when the Legislature of Ontario finally decided that no financial assistance should thereafter be given to denominational institutions.

In 1881, the College was affiliated with the University of Toronto, an arrangement having been entered into by which students proceeding to the degree of B.A. should attend lectures at University College in all subjects excepting Philosophy and History.

When in 1883-1884 a movement was on foot looking to the federation of every denominational college of the Province with the Provincial University, St. Michael's was the first to accept the terms proposed, and in 1890, federated upon the proclamation of the University Federation Act.

From the commencement it was understood that such arrangements could not be other than experimental, and meanwhile it became more and more apparent that the experiment must end in failure. After a quarter of a century of affiliation and federation, during which time the University population had been multiplied by five or six, there was scarcely any increase in the number of Catholic students attending University College. During those same years, the Catholic Colleges of the Province had been constantly increasing in the number of their students. It was evident that the plan in operation was not of the kind to secure the confidence of the Catholic population. That population evidently would not favour a purely secular education.

In 1905, St. Michael's found itself in a position to enter upon a scheme of providing instruction in all subjects known as "College Subjects", and made application to be admitted to federation on the same terms as Victoria and Trinity Colleges, claiming with them the privilege of free instruction for its students in University subjects. In response to this application, provision was made in the University Act of 1906 for the development of this scheme, upon the completion of which St. Michael's succeeds to the rank and privileges of a "College of the University". This plan has been worked out with the most satisfactory results.

The Catholic Church does not understand education without religious instruction. In St. Michael's, in every year of the student's course, a due proportion of time is reserved for this, and for the preservation of the religious spirit the greater number of the staff is chosen from the ranks of

the clergy. It must be remembered, however, that St. Michael's is purely an Arts College, and has no theological faculty as such.

It is held as a fundamental principle, that the intimate association of students with one another, and with their teachers, contributes as much to true education as do the lecture room and library. In accordance with this, the majority of the students live in residence. The men students reside at St. Michael's College, the women students reside at St. Joseph's College, or Loretto Abbey College, and are subject from the point of view of discipline to the religious communities in charge of these institutions.

#### ADMINISTRATIVE OFFICERS

REV. E. J. McCORKELL, M.A.....	<i>Superior.</i>
REV. H. S. BELLISLE, M.A.....	<i>Registrar.</i>
REV. J. B. WALSH, M.A.....	<i>Bursar.</i>

#### MEDALS, SCHOLARSHIPS AND PRIZES, 1926

##### FOURTH YEAR—

The Mercier Medal for the highest first class honours in Philosophy—T. McLaughlin.

The Sir Bertram Coghill Alan Windle Medal to the student ranking highest in Honour English—No award.

The Dockeray Prize to the student ranking highest in Pass English—Miss M. Coughlin.

##### THIRD YEAR—

The Phelan Prize to the student ranking highest in Honour English—No award.

The Kernahan Prize for highest first class honours in Philosophy—L. Knowlton.

The Dockeray Prize in Pass English—Miss D. O'Connor.

##### SECOND YEAR—

The Kernahan Prize for the highest first class honours in Philosophy—V. Bourke.

The Hughes Prize in Honour English—Miss J. Brophy.

##### FIRST YEAR—

The McBrady Scholarship in Classics—No award.

##### JUNIOR MATRICULATION—

The Silver Episcopal Jubilee Scholarship—No award.

Knights of Columbus Scholarship—E. Noonan.



---

FACULTY OF MEDICINE

---

## DEGREES AND DIPLOMAS IN MEDICINE

1. The forty-first session since the re-establishment of the Faculty of Medicine of the University of Toronto will commence on Tuesday, September 27th, 1927.

2. The Degrees in Medicine are Bachelor of Medicine—M.B., Bachelor of Science—B.Sc. (Med.), Doctor of Medicine—M.D., and Master of Surgery—Ch.M.

The Diplomas in Medicine are:—Diploma of Public Health—D.P.H., and Diploma in Radiology—D.R.

### DEGREE OF BACHELOR OF MEDICINE

3. Candidates for the degree of Bachelor of Medicine are required to matriculate and to attend during six sessions of at least eight months each the courses of instruction presented, and to pass examinations taken at the end of each session.

### ENTRANCE REQUIREMENTS

4. Details in individual cases as to entrance requirements to the University, may be obtained on application to the Registrar of the University.

5. A candidate for admission to the First Year in the Faculty of Medicine must produce satisfactory certificates of good character and of having completed the seventeenth year of his age on or before the first of October of the year in which he proposes to register; only under exceptional circumstances will a candidate of thirty years or more be admitted.

He must also present certificates giving him *full* credit in the following subjects of Pass and Honour Matriculation:

#### PASS MATRICULATION

LATIN (Authors and Composition)

ENGLISH (Literature and Composition)

HISTORY (British and Ancient)

HISTORY (British and Ancient) *or*

BRITISH HISTORY and MUSIC

MATHEMATICS (Algebra and Geometry)

EXPERIMENTAL SCIENCE (Physics and Chemistry)

Any one of:

GREEK (Authors and Composition)

FRENCH (Authors and Composition)

GERMAN (Authors and Composition)

SPANISH (Authors and Composition)

ITALIAN (Authors and Composition)

## HONOUR MATRICULATION

ENGLISH (Literature and Composition)

MATHEMATICS (Algebra, Geometry and Trigonometry)

One of:

LATIN (Authors and Composition)

GREEK (Authors and Composition)

FRENCH (Authors and Composition)

GERMAN (Authors and Composition)

NOTE: Physics or Chemistry or Botany or Zoology of Honour Matriculation may be substituted for Trigonometry.

6. Students are required to complete above matriculation requirements before being admitted to the course in Medicine.

7. A student who has fully completed the First Year in the Faculty of Arts of the University of Toronto, will be admitted to the First Year in the Faculty of Medicine, provided he has at least Pass Matriculation standing in Experimental Science. No fee will be charged for transferring from the Faculty of Arts to that of Medicine.

8. A candidate possessing a degree in Arts from any recognized University may be considered as having fulfilled the entrance requirements.

9. A candidate coming from a Province of Canada other than Ontario must present certificates of a standard equivalent to that required from students of the Province of Ontario.

10. A candidate for admission from the British Isles must present a certificate of registration as a medical student with the General Medical Council of Great Britain.

## APPLICATION FOR EQUIVALENT STANDING

11. Any student of another University or College who desires to be admitted to the Faculty of Medicine of this University with equivalent standing is required first to communicate with the REGISTRAR OF THE UNIVERSITY, SIMCOE HALL, forwarding to him a full statement of preliminary education with certificates. After receiving notice from the Registrar that the entrance requirements have been met, the student should send an application to the Secretary of the Faculty of Medicine together with—

(a) A calendar of the University in which he has studied, giving a full statement of the courses of study.

(b) A complete official statement of the course he has followed and the standing obtained in percentage.

(c) A certificate of moral character and conduct.

After submission of this application to the Faculty Council the candidate will be notified as to the decision reached.

No student from a Medical Faculty of another University will be accepted unless his certificates show that he has completed the work and examinations in the subjects for which the certificates are presented.

## REGISTRATION

12. Students desiring to enter the course in Medicine are required to submit their application form in duplicate along with the certificates on which they claim entrance standing, to the REGISTRAR OF THE UNIVERSITY, SIMCOE HALL, on or before September 1st. After this date each candidate will be notified as to whether his application has been accepted or not, a card of admission being enclosed to those applicants who are accepted.

13. On presentation of this card on or before the day of registration (September 27th) to the Secretary of the Faculty of Medicine, candidates will be officially registered by him as students in Medicine.

14. Students in the Second and higher years will receive by mail from the Secretary, an application form for registration in the succeeding year. This form must be filled in and forwarded to the office of the Secretary of the Faculty of Medicine on or before September 1st.

15. On September 27th a student must present himself in person for his registration card which gives his number, section and class. No student shall be allowed to register in the Faculty of Medicine after the first day of term. No student shall be admitted to any laboratory or clinical class after its first meeting except at the discretion of the instructor concerned.

16. Every petition for registration subsequent to September 27th must be accompanied by a sum of money reckoned at one dollar per diem for each day after the above date. For sufficient cause the whole or part of such a sum may be refunded.

17. No student will be permitted to register in the second or any succeeding year until he has completed all the examinations of the preceding year.

18. Only under exceptional circumstances will a student be permitted to repeat his year more than once.

19. Subdivision into sections and clinical classes will be made by the Secretary. Students wishing to be placed in the same section or clinical class must file personally signed applications conjointly with the Secretary on or before June 1st.

20. For regulations *re* Licence to Practise, see page 418.

## ATTENDANCE

21. Students are required to attend lectures and receive practical instruction during each of the six years at this University.

22. A student who fails to do satisfactory term work in any subject is not permitted to present himself for examination.

23. In cases of students applying for temporary positions in hospitals, laboratories or for *locum tenens* to physicians, the permission of the Faculty



Council must be obtained before they will be allowed to absent themselves from the lectures and laboratory work of the University.

24. Students who have completed the work of the Fifth Year are required, before commencing the course of studies of the Sixth Year, to undertake field work in Public Health and Preventive Medicine. This course may be taken either in June or September.

Assignment of students to Health Departments, arrangement of time when the course is to be taken and the syllabus of work will be arranged for by the Department of Hygiene and Preventive Medicine before the close of the work of the Easter Term in the Fifth Year.

The standard attained by the student in this course will be used in determining his final mark in this subject.

25. *No applications or petitions for exemptions from classes, laboratory work or examinations will be received or considered unless filed at the Secretary's office on or before October 15th of any year.*

## FEES

### REGULAR STUDENTS IN MEDICINE

26. All University fees are payable at the Bursar's office in Simcoe Hall between the hours of ten and one o'clock, except on Saturday.

First Year, including tuition, library, laboratory supply and one annual examination..... \$150.00

27. Second, Third, Fourth, Fifth and Sixth Years—Annual Fee, including tuition, library, laboratory supply, hospital\* and one annual examination—

If paid in full on or before November 10th..... \$200.00  
By instalments—

First instalment, if paid on or before November 10th..... 100 00

Second instalment, if paid on or before February 10th..... 103.00

Hart House and Students' Administrative Council fee, to be paid by all men students proceeding to the degree... 12 00

Women Students' Administrative Council Fee, to be paid by all women students proceeding to the degree..... 4.00

\*The composite fee of \$200.00 includes one session's clinical facilities at the Toronto General Hospital, St. Michael's Hospital, or Toronto Western Hospital, and the Hospital for Sick Children, but does not cover the midwifery ticket for the Burnside Lying-in Hospital, which must be paid in addition, to the Bursar.

## 28. STUDENTS IN COMBINED COURSE IN ARTS AND MEDICINE.

Annual Fee, including college registration, library, laboratory supply, and one annual examination:

	Arts Fecs.	Medical Fecs.	Total.
First Year Arts.....	\$92.00		\$92.00
Second Year Arts.....	93.00		93.00
Third Year Arts and Second Year Medicine...	97.00	\$125.00	222.00
Fourth Year Arts and Third Year Medicine...	107.00	125.00	232.00

The fees for the Fourth, Fifth and Sixth Years in the Faculty of Medicine are as for regular students.

## Payment of the Medical portion of the fees—

If paid on or before November 10th..... \$125.00

## By instalments—

First instalment, if paid on or before November 10th..... 63.00  
 Second instalment, if paid on or before February 10th..... 64.00

## 29. GRADUATE AND SPECIAL COURSES

- (1) Graduates attending undergraduate courses per month \$25.00  
 (2) B.Sc. (Med.) Course..... 25.00  
 Fee for Examination..... 10.00  
 (3) D.P.H. Course..... 200.00

## By instalments:

- 1st instalment at the beginning of the Fall Session 100.00  
 2nd instalment at the beginning of the Winter  
 Session..... 100.00  
 Fee for the Diploma..... 20.00  
 (4) Short Course in Radiology..... 100.00  
 (5) Diploma in Radiology..... 400.00

30. All of the above fees are payable in advance. After November 10th, a penalty of \$1.00 per month will be imposed until the whole amount is paid. In the case of payment by instalments the same rule as to penalty will apply. Students must have paid fees due in first term before proceeding to the work of the second term. A student will not be admitted to any of the University lectures or laboratories who is in arrears for his fees.

## 31. GENERAL FEES.

Matriculation, or registration of Matriculation.....	\$5.00
Supplemental examinations.....	10.00
Admission <i>ad eundem statum</i> .....	10.00
Degree of M.B.....	10.00
Degree of B.Sc. (Med.).....	10.00

In the case of candidates for the Final Examinations, the fee for the degree must be paid to the Bursar not later than the 20th of March.

HART HOUSE FEE

32. The annual fee..... \$8.00

Every male student in attendance, proceeding to a Bachelor's degree in the Faculty of Medicine is required to pay to the Bursar before December 1st the annual fee of eight dollars for the maintenance of Hart House. If this fee is not paid by the above date a penalty of two dollars will be imposed, making the total fee ten dollars.

STUDENTS' ADMINISTRATIVE COUNCIL FEE

33. The annual fee..... \$4.00

Every male student in attendance proceeding to a Bachelor's degree in the Faculty of Medicine is required to pay to the Bursar at the time of the entry of his name with the Registrar the annual fee of four dollars for the maintenance of the Students' Administrative Council.

WOMEN STUDENTS' ADMINISTRATIVE COUNCIL FEE

34. The Annual Fee..... \$4.00

Every woman student in attendance, proceeding to a Bachelor's degree in the Faculty of Medicine, is required to pay to the Bursar at the time of the entry of her name with the Secretary, the annual fee of four dollars for the maintenance of the Women Students' Administrative Council.

MEN'S PHYSICAL TRAINING FEE

35. The annual fee..... \$5.00

Every male student in attendance proceeding to a Bachelor's Degree in the Faculty of Medicine is required to pay to the Bursar the annual Physical Training fee of \$5.00 at the opening of each session in which Physical Training is compulsory for that Student.

WOMEN'S PHYSICAL TRAINING FEE

36. The annual fee.....\$4.00

Every woman student in attendance proceeding to a Bachelor's Degree in the Faculty of Medicine is required to pay to the Bursar the Physical Training Fee of \$4.00 at the opening of each session in which Physical Training is compulsory for such student.

SUPPLEMENTARY PHYSICAL TRAINING FEE

37. Supplemental fee.....\$10.00

Every student who has neglected to complete satisfactorily the course in Physical Training of the First or Second Year and who must take this work during the Second or Third Year respectively of his or her course, will be required to pay to the Bursar at the opening of the session a Supplemental fee of \$10.00, in addition to the prescribed Physical Training Fee.

## MEDICAL SOCIETY FEE

38. The annual fee..... \$2.00

Every student in attendance proceeding to a Bachelor's Degree in the Faculty of Medicine is required to pay to the Bursar at the opening of the Session, an annual fee of \$2.00 for the maintenance of the Medical Society.

## MICROSCOPES

39. Every student entering the Faculty of Medicine will be required to provide himself at the commencement of the third year of his studies, with a microscope of approved design. The microscope must be of substantial construction, and be provided as a minimum, with the following accessories:—Objectives—16 mm., 4 mm. and 1.8 mm. oil immersion; oculars  $\times 5 \times 10$ ; triple nose piece; and a substage condenser with an iris diaphragm. Such an instrument is an essential part of the equipment of a practitioner in medicine.

The Faculty of Medicine have made arrangements whereby such an instrument can be purchased at a reasonable price. Students entering their third year in medicine are allowed the privilege of purchasing a microscope on a deferred payment plan, the payments extending over three years and being payable through the Bursar of the University.

Full details regarding the microscopes and methods of payment can be obtained on application to the Secretary of the Faculty of Medicine, or to Professor V. J. Harding, Department of Pathological Chemistry.

## SUMMARY OF STUDENTS' EXPENSES

40. The following approximate statement of expenses will give the student a general idea of the cost of obtaining an education in Medicine in the University of Toronto, exclusive of personal expenses:

1. Fees for tuition, per year (except First).....	\$200.00
2. Hart House and Students' Administrative Council, per year.....	12.00
3. Matriculation.....	5.00
4. Degree of M.B.....	10.00
5. Midwifery ticket.....	8.00
6. Physical Training Fee (First and Second Years), per year.....	5.00
7. Medical Society Fee, per year.....	2.00
8. Microscope.....	85.00
9. Instruments.....	30.00
10. Books, per year.....	40.00
11. Board and lodging, per week.....	10.00 up

## INSTRUCTION

41. The course of instruction given by the Faculty of Medicine in preparing students for the degree of M.B. consists of six sessions of eight months each.

The course is so framed that the requirements of the various Provincial Licensing bodies are fulfilled and it aims at giving the student such a training in the sciences as is now exacted of all those who desire to obtain any British Medical qualification in addition to a Canadian one.

## OPTIONS OF PRIMARY YEARS

42. The student of Medicine is reminded that during his years of study he is preparing himself to enter a profession which presents manifold and diverse aspects. No prescribed course of study of practicable length can by any possibility fit the student for all of the special careers which the profession of medicine offers. The curriculum provided by the Faculty of Medicine is designed to furnish a framework of knowledge and technical skill which will adequately equip all students for the general practice of medicine and its branches, the time allotted for this purpose, in every subject of the course, being well in excess of that required as the minimum by examining boards and Universities in this and other countries. The six years' curriculum, however, also provides for the student filling in and amplifying his regular work with special studies that are designed either to broaden his general education, and therefore, make him better fitted for the practice of medicine, or to enable him to undergo, in certain of the subjects of the curriculum, a somewhat more intensive training than is essential for all students, so as to prepare him for some particular type of medical career. To enable the student to accomplish these purposes a number of hours of optional study is prescribed, the precise subjects of study being largely left to the student's choice. It is, however, expected that this choice will not be aimless, but made of set purpose and designed to some particular end.

Final selection of options should be made in consultation with the Student Adviser (see Par. 44).

The optional courses available in the six year curriculum are of two types, entitled for convenience, Cultural Options and Scientific Options. During the First Year no Scientific Options are available, but each student must take one Cultural Option; during the Second and Third Years he must take one Cultural Option and one Scientific Option.

The following subjects are available for options:

*First Year—Cultural Options*

English

Mathematics

Scientific French

Scientific German

*Second Year—Cultural Options*

English  
 Mathematics  
 Scientific French  
 Scientific German  
 History  
 Psychology  
 Economics  
 Philosophy

*Scientific Options*

Chemistry (Volumetric Analysis)  
 Physics  
 Biology (Heredity and Eugenics)

*Third Year—Cultural Options*

English  
 Mathematics  
 Scientific French  
 Scientific German  
 History  
 Psychology  
 Economics  
 Philosophy  
 History of Physiology  
 Problems of Biology

*Scientific Options*

Physics  
 Anatomy  
 Embryology  
 Parasitology  
 Cytology  
 Com. Neurology  
 Anthropology

The so-called "Cultural Options" are provided in order that the student may be afforded, through them, an opportunity of acquiring a somewhat broader field of interest than that provided by a curriculum confined strictly to Medical subjects. A student who has attained some insight into such subjects as History, Economics, English, Philosophy, etc., and who has learned to speak and write in a clear, simple and convincing manner, is necessarily better prepared to uphold the traditions of his profession by entering with intelligence into the life and interest of the community, than one whose outlook is restricted to the field of Medical Science.

The Scientific Options are provided in order to enable a student to perform more advanced work in the departments of Medical science in which he is especially interested. They also supply facilities for those students who wish to enter certain special fields after graduation, such as Psychiatry, Public Health or Laboratory Investigation. For example, the student who intends to devote himself to the study of Psychiatry is recommended to take the options in Psychology and Biology in his second year and Psychology in his third year. The student desiring to work in the field of Public Health is advised to take the course in Economics in order that he may comprehend the social and statistical aspects of such work, the course in Parasitology which will acquaint him with the structure, habits and control of disease-bearing insects, and that in Mathematics which provides the necessary familiarity with Statistical methods. The student interested in a career of laboratory investigation, should select

that subject which best leads to his chosen field. He is reminded, however, that in all fields of Laboratory Research, Mathematics is of increasing importance and he is therefore strongly urged to acquire a knowledge of elementary Calculus and of Statistical Methods by taking the Mathematics option in each of the first three years.

### OPTIONS OF FINAL YEARS

43. Students who have attained a certain standing in the courses of the first three years will be permitted to continue taking options during the 4th and 5th years. The time assigned for option courses during the 4th and 5th years will be seen to be sufficient for one option (60 hours). The subjects from which the options may be chosen during each of the years are given in the attached table.

An option in any one of the following Departments may be taken in the Fourth Year:

- |                  |                  |
|------------------|------------------|
| 1. Physiology.   | 4. Physics.      |
| 2. Biochemistry. | 5. Psychiatry.   |
| 3. Anatomy.      | 6. Bacteriology. |

Options in any one of the following Departments may be taken during the Fifth Year, as follows:

- |                  |                               |
|------------------|-------------------------------|
| 1. Physiology.   | 7. Pathological Chemistry.    |
| 2. Biochemistry. | 8. Bacteriology and Serology. |
| 3. Anatomy.      | 9. Hygiene.                   |
| 4. Physics.      | 10. Pathology.                |
| 5. Psychiatry.   | 11. Military Studies.         |
| 6. Pharmacology. |                               |

Emphasis should be placed on the principle that no attempt is made in the optional classes of the later years, to train students as specialists. There are, for example, no options in subjects like laryngology, ophthalmology, radiology, etc., since it is believed unsound to train men to be specialists in these fields until they have thoroughly rounded out *their* medical or surgical education and have served a year as an interne in the hospital. On the other hand students who have definitely decided that their future career lies in one or other of the specialties will be privileged, during their option time, to take courses in the pre-medical or fundamental sciences upon which these specialties depend. For example courses in Physics and Physiology dealing with the question of optics, acoustics, radiology, etc., are given.

## STUDENT ADVISER

44. A student adviser is appointed by the Faculty to assist and advise the undergraduates in the various years, more especially with regard to their academic work and methods of study outside of lectures, laboratory or clinical classes. Every student is required to submit to the adviser a list of his proposed studies and his time table, and the written approval of the adviser and the consent of the Faculty Council will be required before the student's registration will be considered to have been completed. It is understood that any coherent plan of study designed by the student for a particular and intelligible purpose will be approved, but courses of study which appear to be manifestly unsuitable, and for his choice of which the student can furnish no adequate explanation or excuse, will not be approved by the adviser.

The student adviser for the session 1927-28 will be Dr. E. S. Ryerson, who may be consulted in the Secretary's Office between 2 and 5 p.m. daily.

## 45. SUBJECTS OF INSTRUCTION

NUMBER OF HOURS SPENT IN DIDACTIC, LABORATORY  
AND CLINICAL WORK

*First Year.*

Subject	Didactic	Laboratory	Total
Biology	60	210	270
Chemistry	60	180	240
Physics	90	180	270
Science and Civilization	60	...	60
English Expression	30	...	30
Option	60	...	60
Physical Training	..	...	60
	360	570	990



*Second Year.*

Subject	Didactic	Laboratory	Total
Anatomy	30	420	450
Histology and Embryology	75	165	240
Chemistry	60	45	105
Physiology	20	..	20
Option one	60	...	60
Option two	..	90	90
Physical Training	..	...	60
	245	720	1,025

*Third Year.*

Subject	Didactic	Laboratory	Total
Physiology (including Psychology)	120	180	300
Biochemistry	90	135	225
Bacteriology	..	165	165
Anatomy	60	180	240
Option one	60	...	60
Option two	..	60	60
	330	720	1050

*Fourth Year.*

Subject	Didactic	Laboratory	Clinical	Total
Medicine and Clinical				
Microscopy	90	...	180	270
Surgery	60	...	120	180
Pathology	90	270	...	360
Pathological Chemistry	..	60	...	60
Psychiatry	15	...	...	15
Pharmacology	30	90	...	120
Applied Anatomy	30	...	...	30
Option	..	60	...	60
	315	480	300	1,095

*Fifth Year.*

Subject	Didactic	Laboratory	Clinical	Total
Medicine (including Paediatrics)	45	...	300	345
Surgery	30	...	120	150
Obstetrics and Gynaecology	75	...	20	95
Pathology	45	...	...	45
Pathological Chemistry	30	30	...	60
Ophthalmology	..	...	15	15
Oto-Laryngology	..	...	15	15
Hygiene and Preventive Medicine	45	...	...	45
Med. Juris. and Toxicology	30	...	...	30
Psychiatry	15	...	...	15
Therapeutics	45	...	10	55
Radiology	15	...	...	15
Applied Anatomy	30	...	...	30
Option	..	60	...	60
	405	90	480	975

*Sixth Year.*

Subject	Didactic	Laboratory	Clinical	Total
Medicine (including Paediatrics)	..	..	410	410
Surgery	30	..	190	220
Obstetrics and Gynaecology	30	..	140	170
Pathology	30	40	...	70
Ophthalmology	10	..	10	20
Oto-Laryngology	10	..	10	20
Hygiene and Preventive Medicine	..	..		112*
Psychiatry	..	..	20	20
Therapeutics	5	..	25	30
Radiology	..	40	..	40
Dentistry	5	..	..	5
History of Medicine	10	..	..	10
Medical Ethics	3	..	..	3
Life Insurance	2	..	..	2
Applied Physiology	10	..	..	10
	145	80	805	1,030

\*The student is required to spend this time in field work in Hygiene and Preventive Medicine between the Fifth and Sixth Years.

## COMBINED COURSE IN ARTS AND MEDICINE

46. It is possible for a student who takes this Biological and Medical Sciences Course, followed by the final years of the Medical Course, to obtain the degree of Bachelor of Arts at the end of four years and of Bachelor of Medicine after seven years study at the University. When entering the third year of the Arts course, these students register in the second year of Medicine and on entering their fourth year Arts, they register in the third year Medicine.

47. In the curricula of this Arts Course the Science subjects are treated more extensively than they are in the Medical curriculum.

48. The Biological and Medical Sciences Course completes the requirements of the first three years in Medicine. First and Second Years in the Biological and Medical Sciences Course are accepted as the equivalent to the First Year in Medicine. The first two years' work is the same as that for the Honour Arts' course in Physiology and Biochemistry. The students who proceed during the third and fourth years of the latter course take up the subjects of Physiology and Biochemistry *without specific reference to Medicine*.

49. Only those students who graduate from the Biological and Medical Sciences Course with Honour standing will be admitted to the fourth year in the Faculty of Medicine.

50. These courses not only afford opportunities for a broader training and greater scientific attainment than is possible in the six years' course in Medicine, but they fit the student for a much wider field of usefulness after graduation. The graduate who has taken one of these Science Courses in Arts and subsequently the Course in Medicine is qualified to devote his life to one of the purely scientific lines of Medicine, if he should so elect, after leaving the University, and, moreover, he is, undoubtedly, better fitted to practise his profession should he desire to prepare himself for that alone.

51. Students who proceed to the Arts degree through other Science Courses may, on entering the Faculty of Medicine, be allowed exemption from such subjects in Medicine as they have taken in the curricula of the Faculty of Arts.

## B.Sc. (MED.) COURSE

52. The degree of B.Sc. (Med.) has been added to the curriculum in Medicine so as to encourage scholarship and research in the introductory medical sciences and in the sciences immediately accessory to medicine and surgery.

The degree is available to two classes of candidates, viz:—

(1) Students of the Six Years' Course who have reached the end of the third or subsequent year and who have completed an additional year's work outside of the regular medical curriculum, on a basis of an instructional schedule and research, subject to:

(a) The work of the additional year shall consist in the main of one major and two minor subjects;

(b) The candidate will be accepted for registration only on recommendation of the departments in which these subjects lie, subject to the approval of the sub-committee in charge of the degree;

(c) The course in the major subject shall include a research problem;

(d) The candidate must pass an examination in the major and minor subject, to be conducted by the departments concerned;

(e) The candidate must show proficiency in reading one modern language other than English to the satisfaction of the department in charge of the major subject.

(2) Graduates of the Six Years' Course\* who have completed an additional year's work consisting chiefly of research in some one introductory or clinical laboratory department of the Faculty of Medicine, subject to the following conditions:

(a) The candidate will be accepted for registration only on the recommendation of the department concerned, subject to the approval of the sub-committee in charge of the degree;

(b) The candidate must show proficiency in reading one modern language other than English to the satisfaction of the scientific department in charge of his work.

(3) Graduates in Medicine from Universities other than Toronto may apply for registration for the B.Sc. (Med.) Degree. Such students must satisfy the Committee as to their Equivalent Standing (page 12, par. 11).

A sub-committee of the Committee on Curriculum and Examinations administers the degree of B.Sc. (Med.). All candidates must be approved by the sub-committee on the basis of their preliminary qualifications and the majors and minors selected by the candidate must be approved by this sub-committee.

### ADMISSION TO EXAMINATIONS

53. Every student who proposes to present himself at the Annual or Supplemental Examinations must see that the Secretary has in his possession the following:—

1. *An Application for Examination.* The form supplied must be filled in, signed, and left in the Secretary's Office on or before March 1st. Students presenting applications after this date must pay an additional fee of One Dollar.

\*Until 1926, applications from graduates of the five year course will be considered, provided they are not of more than one year's standing.

54. *Candidates for the Degree of Bachelor of Medicine* are required to have on their Certificates of Attendance the following additional particulars:—

(a) A certificate of having conducted at least twenty labours under the supervision of the Head of the Department of Obstetrics and Gynaecology.

(b) A certificate of proficiency in vaccination, from the Head of the Department of Hygiene.

(c) A certificate of having attended fifteen autopsies under the supervision of the Head of the Department of Pathology.

(d) A certificate of having administered anaesthetic on six occasions, under the supervision of the Head of the Department of Therapeutics.

55. No candidate will be admitted to the Annual or Supplemental Examinations unless he has paid all the fees due from him.

56. No candidate will be admitted to the Annual or Supplemental Examinations unless he has complied with the regulations respecting attendance upon didactic, laboratory and clinical work in each of the subjects of instruction for the year in which he seeks examination.

57. No candidate in a course involving practical work in a laboratory or clinic will be admitted to the Annual or Supplemental Examinations if the Professor under whom his work is carried on reports in writing to the Secretary that he has not done satisfactory laboratory or clinical work, or has signally failed in the practical examinations.

58. Undergraduates who have been prevented from attending the Annual Examinations by sickness, domestic affliction, or other causes beyond their control, may make application for permission to present themselves for examination at the Supplemental Examinations in September, and must give satisfactory evidence of the cause of absence.

## EXAMINATIONS

59. The Annual Examinations are held in May at the end of the First, Second, Third, Fourth, Fifth and Sixth academic years, and the Supplemental Examinations in September.

60. The minimum pass standard in each subject of examination is 50%.

## HONOUR STANDING

61. Candidates at the Annual Examinations who obtain an average of 70% in all subjects of the year, and not less than 60% in any one subject, shall have their names published as having "Passed with Honours".

Candidates who have passed with Honours in the Second, Third, Fourth, Fifth and Sixth Years of the course shall have their names published as having "Graduated with Honours".

## SUBJECTS OF THE ANNUAL EXAMINATIONS

## 62. FIRST EXAMINATION.

1. Biology.
2. Chemistry.
3. Physics.
4. Science and Civilization and English Expression.
5. Option.

## 63. SECOND EXAMINATION.

1. Anatomy.
2. Histology, Embryology.
3. Organic and Physical Chemistry.
4. Option one.
5. Option two.

## 64. THIRD EXAMINATION.

1. Physiology.
2. Biochemistry.
3. Anatomy.
4. Bacteriology.
5. Option one.
6. Option two.

## 65. FOURTH EXAMINATION

1. Medicine.
2. Surgery.
3. Pathology.
4. Pharmacology.

## 66. FIFTH EXAMINATION

1. Medicine (including Paediatrics).
2. Surgery.
3. Obstetrics and Gynaecology.
4. Pathological Chemistry.
5. Hygiene and Preventive Medicine.
6. Medical Jurisprudence and Toxicology.
7. Therapeutics.

## 67. SIXTH EXAMINATION

1. Medicine.
2. Surgery.
3. Obstetrics and Gynaecology.
4. Paediatrics.
5. Clinical Ophthalmology.
6. Clinical Oto-Laryngology.
7. Clinical Therapeutics.

NOTE.—Questions in Pathology may be asked on the papers in Medicine, Surgery or Obstetrics and Gynaecology.

Questions on Applied Anatomy may be asked on the papers in Medicine and Surgery in the Fourth, Fifth and Sixth Examinations.

68. Candidates of the First Year who fail in any subject or subjects at the Annual Examinations may present themselves at the Supplemental Examinations next ensuing.

Candidates of the First Year who

- (a) fail to present themselves for the Annual or the Supplemental Examinations, or
- (b) fail in any subject or subjects at the Annual Examinations and do not present themselves for the Supplemental Examinations, or
- (c) fail in any subject or subjects at the Supplemental Examinations, will be permitted to register again to repeat the First Year of the course only under very exceptional circumstances, and must obtain the permission of the Faculty Council before being allowed to register.

(The students' attention is particularly drawn to paragraphs 16 and 17, page 402).

69. Candidates at the Second, Third, Fourth, Fifth and Sixth Examinations who have passed in all but two subjects may present themselves at the Supplemental Examinations next ensuing.

70. Candidates at the Fourth, Fifth and Sixth Examinations failing in three or more subjects must repeat the entire work of the year, including the examinations in every subject of the year.

71. Candidates of the Second or Third Years who fail in three or more subjects at the Annual Examinations will be permitted to present themselves at the Supplemental Examinations or to register again to repeat the year only under very exceptional circumstances, and must obtain the permission of the Faculty Council before being allowed to register.

72. Candidates whose examination records include stars in five subjects (whether subsequently written off or not) during the first three years of the course, will be permitted to present themselves for Supplemental Examinations or to register again only under very exceptional circumstances, and must obtain the permission of the Faculty Council before being allowed to proceed.

73. Candidates at the Supplemental Examinations who succeed in passing in the one or the two subjects in which they were conditioned at the Annual Examinations shall be allowed their year.

74 (a) Candidates at the Supplemental Examinations of all years except the Sixth who fail in any subject in which they were conditioned, will be required to repeat the entire work of the year, including the examinations thereof in every subject.

(b) Candidates in the Sixth Year, failing in one subject at the Supplemental Examinations, will be permitted to spend one trimester in the work of this department and thereupon present themselves for re-examination.

75. Candidates of the First, Second or Third Years who at the Supplemental Examinations fail to pass in one optional subject in which they were conditioned will be permitted to register in the next succeeding year, but will be required to pass the examination in this option at the end of the year, before they will be allowed to proceed with their course.

76. Candidates in the Fourth and Fifth Years taking Options must satisfy the Head of the Department concerned that they have done satisfactory work. Reports on the character of their work are to be sent to the Secretary of the Faculty by the Head of the Department.

77. In all examinations the quality of English written or spoken by the candidate, especially its lucidity and its fitness to the subject, will carry great weight with the examiner. If a candidate in the first year is reported by the examiners as having used English of a low standard, this report will be considered in determining his standing at the final examinations of that year.

78. It has been the regulation for some years that students be not informed of the marks they have obtained at the Annual or Supplemental Examinations. In future a statement will be sent to all students who have not completely passed in all examinations and to any other students who request the same *in writing*, from the Secretary indicating their approximate standing as follows:—

A—70% to 100%.

B—50% to 69%.

C—40% to 49%.

D—below 40%.

In awarding prizes and fellowships the marks for optional subjects or courses will not be included.

## 79 REGULATIONS FOR LICENCE TO PRACTISE

Each Province has a Medical Council (College of Physicians and Surgeons) which grants a licence to practise Medicine in that Province to those candidates who have satisfactorily fulfilled their requirements (Matriculation and Professional). Each Provincial Council determines what these requirements shall be and when registration is to be effected.

In the Province of Ontario, the College of Physicians and Surgeons requires that every student who belongs to this Province shall effect his registration with the Registrar at the Office of the College, 170 University Ave., when he is beginning his medical studies. The other Provinces of Canada have somewhat similar regulations.

Students are therefore required to complete their registration for licence to practise within their own Province in the First Year of the Medical Course or the Second Year of the Combined Course in Arts and Medicine.



Candidates desiring to present themselves for the licensing examinations of the College of Physicians and Surgeons of Ontario must file applications with the Registrar on or before the last day of April in their graduating year. Such applications must be accompanied by certificates and the examination fee of \$100.

The Medical Council of Canada conducts examinations whereby "any person who secures registration on the Medical Register of Canada by examination is entitled to register without further examination, in any Province of Canada, on complying with the necessary regulations pertaining thereto, including the payment of the Provincial registration fee". The certificate granted on the passing of this examination does not permit the holder to practise in any Province, but enables him to register with the licensing body of the Province without taking the Provincial examinations.

Candidates for the examinations of the Medical Council of Canada must present either (a) licence of a Provincial Medical Council or Board of Examiners, or (b) a certificate (called an enabling certificate) from the Registrar of a Provincial Council, or Board, that the requirements of that Council or Board in regard to preliminary education, matriculation, medical curriculum and graduation have been complied with.

Candidates desiring to present themselves for the examinations of the Medical Council of Canada must obtain the enabling certificate from the Registrar of their "home" Province and forward it to the Registrar, Dr. R. W. Powell, 180 Cooper Street, Ottawa, at least two weeks prior to the date of the examination. This must be accompanied by the following information: Name; home province; present address; place where preliminary education taken; place and date of matriculation, place and date of graduation, place and date of enrolment with any Provincial licensing Board or College, if any; Province and date, if a licensed Practitioner.

For official information of all matters relative to the regulations for licence to practise in the various Provinces in the Dominion, students should communicate with the Registrar. The following is a list of the names and addresses of the Registrars of the Medical Councils:

Ontario—Dr. H. W. Aikins, 170 University Ave., Toronto.

Quebec—Dr. J. Gauvreau, Dandurand Bldg., St. Catherine St. E.,  
Montreal.

New Brunswick—Dr. John S. Bentley, 138 Charlotte St., St. John.

Nova Scotia—Dr. W. H. Hattie, Halifax.

Prince Edward Island—Dr. James Warburton, Kent St., Charlottetown.

Newfoundland—Dr. T. Mitchell, St. John's.

Manitoba—Dr. J. E. Coulter, 604 Boyd Bldg., Winnipeg.

Alberta—Dr. G. R. Johnson, Calgary.

Saskatchewan—Dr. A. MacG. Young, Saskatoon.

British Columbia—Dr. A. P. Proctor, Vancouver.

## 80. REGULATIONS FOR THE DEGREE OF DOCTOR OF MEDICINE

An advanced degree in Medicine is offered to Graduate Students, viz., Doctor of Medicine (M.D.).

(1) A graduate in Medicine of at least two years' standing who has obtained the degree of Bachelor of Medicine of the University of Toronto and has spent

(a) At least one year as an interne on the wards of a teaching hospital and at least one year in laboratory work which, in the opinion of the Faculty of Medicine of the University, has a direct bearing on Medicine; or

(b) At least two years in hospital or laboratory work as above defined; or

(c) At least three years in the general practice of Medicine; may present himself for the Degree of Doctor of Medicine.

Graduates other than those of the University of Toronto who have obtained the degree of Bachelor of Medicine or Doctor of Medicine from a recognized University may present themselves for the Degree of Doctor of Medicine of the University of Toronto under the conditions of this paragraph.

(2) Each candidate for the degree of Doctor of Medicine shall be required to pass an examination in Clinical Medicine in which he shall be required to report upon at least two medical cases assigned to him. If the candidate intends or is practising a Specialty in Medicine, one of the cases selected for the examination shall belong to the Specialty mentioned in the application of the candidate for the Degree of Doctor of Medicine. The candidate must show proficiency in the application of all general methods, bedside and laboratory, in common use in the clinical investigation of patients, as well as an acquaintance with the use, value and application of general methods.

(3) Each candidate for the Degree of Doctor of Medicine shall submit an acceptable thesis on a subject pertaining to the science or practice of Medicine, and this thesis must include a review of the history and literature of the subject selected.

(4) A candidate may offer as his thesis the result of work done and published prior to the date of application for the Degree of Doctor of Medicine, provided it fulfils the above conditions.

(5) The School of Graduate Studies at its discretion may exempt a candidate from the whole or part of the examination in Clinical Medicine if the thesis presented by the candidate is of exceptional merit.

## 81. REGULATIONS FOR THE DEGREE OF MASTER OF SURGERY

An advanced degree in Surgery is offered to Graduate Students, viz., Master of Surgery (Ch.M.).

Before a candidate will be eligible to register for this degree he must have fulfilled the following entrance requirements:

- (1) Graduated in Medicine from a recognized University.
- (2) Spent one year in a recognized hospital as an interne on a rotating service or its equivalent. (Two years general practice may be accepted as the equivalent of this.)

It is recommended that a statement of the course of study proposed, accompanied by the approval of the departments concerned, be sent to the Secretary of the School of Graduate Studies at the time of the candidate's registration.

*Length of Course:*

The course will be nominally of two years' duration of twelve months each.

The course will consist of:

*First Year (Clinical)*

One year's training in Surgery in a hospital approved by the School of Graduate Studies. This may be taken while the student is acting as a Hospital Interne or Resident in Surgery.

At the end of the First Year the candidate must present a certificate to the School of Graduate Studies from the Surgeon in charge of the service in which the candidate has worked, stating the nature and details of the work done, and the degree of efficiency with which it has been carried out.

Providing the credentials of work done are satisfactory to the School of Graduate Studies, the candidate may proceed with the examination.

The candidate will be required to pass a written and oral examination in Anatomy and Physiology.

A candidate failing in the examination may apply for a Supplemental Examination in the subject or subjects in which he has failed.

*Second Year (Clinical)*

One year's training in Surgery in a hospital approved by the School of Graduate Studies. This may be taken while the candidate is acting as a Hospital Interne or Resident in Surgery.

At the end of the second year the candidate must present a certificate to the School of Graduate Studies from the Surgeon in charge of the service on which he has worked, stating the nature and details of the work done and the degree of efficiency with which it has been carried out.

One of the clinical years may be spent in the Department of Obstetrics and Gynaecology.

One year of the course must be taken in the University of Toronto in all cases.

Candidates, besides being familiar with the general field of Surgery, must be able to make:

- (a) A satisfactory examination of the Eye, Ear, Nose and Throat.
- (b) A satisfactory pelvic examination.
- (c) A satisfactory routine laboratory examination.

Candidates must present satisfactory thesis and pass a written and oral examination in General Surgery, including Surgical Anatomy and Pathology.

Before proceeding to the final examination, credentials of work done during the second hospital year must be presented which are satisfactory to the School of Graduate Studies.

Upon application to the School of Graduate Studies a candidate who has fulfilled all other requirements may present himself for examination in all subjects at the end of his second year.

## FELLOWSHIPS, SCHOLARSHIPS AND BURSARIES

### CHARLES MICKLE FELLOWSHIP

82. This Fellowship, bequeathed by the late Dr. W. J. Mickle, being the annual income from an endowment of Twenty Five Thousand Dollars (\$25,000) will be awarded annually to that member of the medical profession who is considered by the Council of the Faculty of Medicine of the University of Toronto to have done most during the preceding ten years to advance sound knowledge of a practical kind in medical art or science.

Awarded in 1921 to I. P. Pavlov, F.R.S., LL.D. Edin.; 1922, H. Cushing, M.D., S.D., LL.D. Moseley; 1923, F. G. Banting, M.C., M.D., LL.D. Qu., D.Sc.; 1924, Sir James Mackenzie, LL.D., M.D., F.R.S.; 1925, A. Krogh, Ph.D., LL.D.; 1926, G. F. Dick, M.D., and Mrs. G. R. Dick, M.D.

### THE GEORGE BROWN MEMORIAL SCHOLARSHIP IN MEDICAL SCIENCE

83. Dr. A. H. F. Barbour, of Edinburgh, having placed two thousand pounds sterling at the disposal of the University of Toronto, for the purpose of founding a Scholarship in Medical Science in memory of the late Hon. George Brown, the following regulations have been adopted with regard thereto:

This scholarship shall be called the George Brown Memorial Scholarship in Medical Science, and shall be awarded every three years at the Convocation for conferring degrees in Medicine, to the Bachelor of Medicine of not more than three years' standing who has taken a high place in the

professional examinations of the last four years of the course, and in addition, in Biology of the first year, and who is judged by a committee composed of the heads of the various departments under which the examinations are given, to be most capable of carrying out research. The holder of the scholarship, during the year of tenure, is required to devote not less than one year to original research, either laboratory or clinical, in a department of the University of Toronto or of any other Medical School or Hospital approved by the aforementioned committee.

This scholarship is to be paid in two portions, two-thirds at the time of award and one-third six months later, on the holder giving satisfactory report (to whomsoever the University shall appoint) of the work he has already done.

A report of the research, when completed, is to be given to the University.

The value of the scholarship is \$1,500.00.

Awarded under the former conditions in 1924 to Miss E. H. Chant, M.A., M.B.; 1925, J. H. Couch, B.A., M.B.

#### ELLEN MICKLE FELLOWSHIP

84. A Fellowship, being the annual income from an endowment of Twenty Five Thousand Dollars (\$25,000) has been established by the late Dr. W. J. Mickle, known as "The Ellen Mickle Fellowship", to be given to the student (or students) who in the examinations at the end of the fifth year of the Six Years' Course in Medicine, shall have taken honours of the first class in at least three fourths of the subjects of that year, and shall have obtained the highest marks in the examinations. The award will be made to the above referred to student (or students) provided he proceed to the degree of Bachelor of Medicine in this University and spend one year in post graduate study approved by the Council of the Faculty of Medicine.

Those students who obtain an average of 70% in all subjects of the year, and not less than 60% in any subject, shall be considered as having obtained Honour Standing.

Awarded in 1921 to J. Hepburn, M.B.; 1922, J. E. Bates, B.A., M.B.; 1923, J. Markowitz, M.B.; 1924, B. I. Johnstone, M.B.; 1925, C. H. Best, M.A., M.B.; 1926, D. W. Pratt, M.B.

#### THE ALEXANDER MCPHEDRAN RESEARCH FELLOWSHIP IN CLINICAL MEDICINE

85. In 1913 a number of business men, on request, subscribed through Professor Alexander McPhedran to a fund for the promotion of Clinical and Laboratory work in the Department of Medicine. In 1924, at the request of the Board of Governors, Professor McPhedran transferred the

balance of this fund to its keeping. With an additional grant made by the Board of Governors the income from the fund was increased for the purpose of founding "The Alexander McPhedran Research Fellowship in Clinical Medicine" of the value of \$1,200 annually. The Fellowship is open to graduates in Medicine of the University of Toronto and of such other Universities and Medical Schools as may be approved of by the Faculty of Medicine. It is tenable for one year but the holder of it is eligible for reappointment. The Fellowship is awarded on the recommendation of the Professor of Medicine to the President, and the holder of it is obliged, during its tenure to devote his whole time to investigations in Clinical Medicine under the direction of the Professor of Medicine.

Applications for nominations to the Fellowship should be forwarded to Professor of Medicine not later than the first day of May of each year.

Awarded in 1926 to E. J. Maltby, M.B.

#### THE JAMES H. RICHARDSON RESEARCH FELLOWSHIP IN ANATOMY

86. This Fellowship of the annual value of Five hundred dollars (\$500.00) has been established in memory of the late Dr. James H. Richardson, for many years Professor of Anatomy in the University of Toronto. It is open to graduates in Medicine of the University of Toronto and of such other Universities and Medical Schools as may be approved by the Nominating Committee and to students in the University of Toronto who shall have completed the third year of the course in Medicine.

The fellowship is awarded on the nomination of a Committee consisting of the Professor of Anatomy, the Professor of Biology and the Professor of Surgery in the University of Toronto, and the holder of it is obliged, during its tenure, to devote his entire time to investigation in Anatomy under the direction of the Professor of Anatomy in the University of Toronto. The fellowship is tenable for one year, but the holder of it is eligible for re-appointment for not more than two additional years, at the discretion of the University Senate upon the recommendation of the Nominating Committee.

Applications for nomination to the Fellowship should be handed to the Professor of Anatomy not later than the first day of May of each year.

Awarded in 1919, 1920 and 1921 to H. G. Willson, B.A., M.B., M.D.; 1922 and 1923, W. C. M. Scott, B.Sc. (Med.); 1925 and 1926, Miss C. H. Crow.

#### THE UNIVERSITY OF TORONTO WAR MEMORIAL SCHOLARSHIPS

87. Four Scholarships, three known as the "No. 4 Canadian General Hospital Scholarships", in recognition of the services rendered by the University Hospital during the War, each of the value of \$250, have

been established by the Alumni Federation of the University from the War Memorial Fund, to be awarded to students in the Faculty of Medicine.

The general basis on which the above Scholarships may be awarded is as follows:

- (a) Standing in course of studies.
- (b) Need of assistance.
- (c) Merit as shown in extra-academic activities—executive, literary, dramatic, athletic, etc.
- (d) Relationship, if any, to active service during the War.

Information regarding these Scholarships may be obtained from the Secretary-Treasurer of the Alumni Federation, Room 225, Simcoe Hall, to whom applications for the same must be made not later than February 15th.

#### THE ROBERT BRUCE BURSARY

88. The Robert Bruce Bursary of the value of \$100, founded from the estate of the late Robert Bruce of Quebec, is awarded annually to a student registered in any year in the Faculty of Arts or in the First Year in the Faculty of Medicine. The following regulations govern the award of this Bursary:

- 1. Until 1948 it shall be awarded only to students of Scottish extraction.
- 2. All candidates must have complete Matriculation in this University as at the date of entrance.
- 3. The award shall be based upon the candidate's academic record, consideration being given to his financial needs.
- 4. The Committee of Award shall consist of the President and the Deans of the Faculties of Arts, Medicine and Applied Science and Engineering.
- 5. Applications for this Bursary shall be filed with the Registrar of the University on or before January 15th.

Awarded in January, 1927, to E. A. Lorimer, Faculty of Medicine.

#### THE BAPTIE SCHOLARSHIP

89. The Baptie Scholarship, bequeathed by the late Margaret W. Baptie, will be awarded annually to a student of the second year in the Faculty of Medicine on the record of his work in the first year, consideration being given to his financial needs.

The value of this Scholarship is \$100—together with the remission of fees to the amount of \$75 for one session.

A student who already holds a Scholarship of the value of at least \$100—exclusive of free tuition—will not be allowed to qualify for this Scholarship.

Applications for this Scholarship must be filed with the Secretary of the Faculty of Medicine on or before September 1st.

Awarded in 1926 to M. C. Wellman.

## THE SIR EDMUND WALKER SCHOLARSHIP

90. The Sir Edmund Walker Scholarship, of the value of \$150 each year for three years, the gift of the family of the late Sir Edmund Walker in commemoration of his services as Chairman of the Board of Governors and later as Chancellor of the University, will be awarded to a student of the First Year in the Faculty of Arts or the Faculty of Medicine on the results of his First Year examination. The primary basis for the award of this scholarship shall be the student's attainments and promise, but financial need shall also be taken into account. The enjoyment of the scholarship shall depend upon satisfactory progress in the year preceding. The award shall be made on June 15th of each year by a committee to consist of the President of the University, the Deans of the Faculties of Arts and Medicine, and Professor E. M. Walker.

Applications for this scholarship must be filed with the Registrar on or before May 1st.

## THE F. W. JARVIS BURSARIES

91. Two Bursaries, known as "The F. W. Jarvis Bursaries", of the value of \$50 each, the gift of A. H. Jarvis, Esq., of Ottawa, brother of F. W. Jarvis, to be awarded under the following conditions:

1. These Bursaries are open only to former students of Ottawa Collegiate Institute (Lisgar Street), who without some such assistance may not be able to carry on their academic courses.

2. They may be awarded at Matriculation or in any year of an undergraduate course in any Faculty of the University.

3. They shall be awarded preferably one to a man and the other to a woman student; but if in any year students of opposite sexes do not apply, both Bursaries may be awarded to men or to women.

4. A Bursary may be held in successive years by the same student and also in conjunction with any scholarship awarded by the University or the federated colleges.

5. The Bursaries shall be awarded by the Senate of the University on the recommendation of a Committee of Award consisting of the President of the University, the Principal of Ottawa Collegiate Institute and the donor; candidates shall make application for the same not later than May 15th on the special form to be obtained from the Registrar.

## THE UBUKATA FUND

92. The S. Ubukata Fund of \$10,000, the gift of Mr. S. Ubukata, provides for the establishment of prizes, medals, scholarships and loans for which Japanese students of all faculties and colleges may be eligible. Information regarding the conditions of award may be obtained from the Registrar of the University.



## MEDALS AND PRIZES

## THE STARR MEDALS

93. The late Richard Noble Starr, M.D., devised certain property for the encouragement of post-graduate study in Anatomy, Physiology and Pathology, and in fulfilment of this object one gold and two silver medals called the "Starr Medals", are awarded annually to three candidates for the degree of M.D., who have shown by the theses which they have presented for that degree, that they have successfully pursued such study in any one of these subjects. The theses for which these medals are given must attain a standard approved of by the Board of Examiners, and the relative value of the theses will determine the rank of the candidates for the medals.

## FACULTY MEDALS

94. The student graduating with honours who shall have obtained the highest aggregate marks at the Annual Examinations of the Second, Third, Fourth, Fifth and Sixth Years of the course shall be awarded the Faculty Gold Medal, and the two students next in order graduating with honours, the Faculty Silver Medals.

These awards shall be made by the Senate, on the recommendation of the Faculty of Medicine.

## THE CHAPPELL PRIZE

95. The late Dr. Walter F. Chappell, of New York, a graduate in the Faculty of Medicine of the University of Toronto, established a prize of Fifty Dollars (\$50.00) per annum to be awarded in alternate years to the best student of the final year in Clinical Medicine or Clinical Surgery. In June, 1927, the prize will be awarded in Clinical Surgery. This prize is awarded on the recommendation of the Head of the Department.

Awarded in 1923 to D. S. Carrie, M.B.; 1924, E. P. Scarlett, B.A., M.B.; 1925, C. E. Knowlton, M.B.; 1926, G. R. Balfour, B.A., M.B.

## GEORGE ARMSTRONG PETERS PRIZE

96. This prize will be awarded annually to the student of the University of Toronto who obtains the highest standing in Surgery in the Final Year of the Medical Course.

The value of the Prize is One Hundred Dollars (\$100.00).

The award of this Prize was made possible by the collection of a fund of money from the friends and students of the late George Armstrong Peters for the purpose of perpetuating the memory of his services to the Faculty of Medicine in the Department of Surgery from 1892 to 1907.

Awarded in 1921 to R. I. Harris, M.B.; 1922, F. G. Banting, M.C., M.D., LL.D., Qu. D.Sc.; 1925, C. E. Knowlton, M.B.; 1926, D. W. Pratt, M.B.

## THE REEVE PRIZE

97. A portion of the Reeve Post-Graduate Fund will be devoted to establishing a prize of \$50.00, to be awarded annually for the best published report of work done in the laboratories by a research Fellow or junior member of the staff in any department in Medicine.

The award shall be made in September by a Committee composed of the Professors of Anatomy, Physiology, Biochemistry, Pharmacology, Pathology and Pathological Chemistry.

Awarded in 1923 to F. G. Banting, M.C., M.D., LL.D., Qu. D.Sc., and C. H. Best, M.A.; 1924, E. C. Noble, M.A.; 1925, W. A. Costain, M.B.; 1926, H. Borsook, M.A.

## THE J. J. MACKENZIE PRIZE IN PATHOLOGY AND BACTERIOLOGY

98. This prize, consisting of the income from \$5,000, is the generous donation of Graham Campbell, B.A., M.B., C.M., in the memory of the late J. J. Mackenzie, for many years Professor of Pathology and Bacteriology in the University of Toronto. It will be awarded annually to the student, who, at the end of the final year is considered to have done the best work in these subjects during his undergraduate course.

Awarded in 1924 to E. P. Scarlett, B.A., M.B.; 1925, C. H. Best, M.A., M.B.; 1926, Miss L. F. Coates, B.A., M.B.

## DONALD C. BALFOUR LECTURESHIP IN SURGERY

99. This Lectureship was founded in 1926, by Donald C. Balfour (M.B. Tor. 1906, M.D. Tor. 1914), of the Mayo Clinic, Rochester, Minnesota. The sum of Four Thousand Dollars has been donated by him to the University for this Lectureship, and the purpose is to bring annually a notable member of the profession to deliver one or more lectures on Surgery to the undergraduates in Medicine.

The following regulations have been adopted with regard to its administration.

(a) This lectureship in Surgery shall be delivered annually during the Fall Term under ordinary conditions;

(b) The holder of the Lectureship shall be given an honorarium of Two Hundred Dollars;

(c) The administration of the Lectureship shall be conducted by a Committee, consisting of the President of the University, the Head of the Department of Surgery and the Dean of the Faculty of Medicine, who shall recommend to the Faculty Council the name of the individual to be invited to fill the Lectureship.

## COURSES FOR GRADUATES IN MEDICINE

100. The Faculty of Medicine of the University of Toronto recognizes that the practitioners of the Province are anxious to keep closely in touch with the advances in Medicine, and that they have a claim on the Provincial University to aid them in doing so. The Faculty considers this entails on it a duty second only to the instruction of the undergraduate.

At the present time the large amount of undergraduate teaching makes it impossible to offer during the academic session set courses of sufficient variety to meet all the needs of those who seek further study.

Those who have studied abroad know that the routine method is for the graduate to attend the instruction given to the students of the senior years in Medicine, to follow the ward rounds and to go to the out-patient department picking up what he can. The Faculty has opened the courses of instruction given to the higher years in Medicine to any one who cares to attend and refresh his knowledge in this way. A Standing Committee has been appointed whose duty it is to give any graduate interested, advice as to the clinics and lectures which should be taken and to confer with the heads of departments and individual teachers so as to arrange a course in advance for each applicant. Such a course may be modified by the committee if it does not prove suitable.

During each year graduates attend undergraduate courses of this kind.

All the library facilities of the University will be open to any post graduate student under the usual conditions.

The staff fully realizes that every effort must be made to render the visit of each post-graduate student both pleasant and of real value. Instruction may be obtained as outlined above in the following:

Medicine.

Surgery.

Obstetrics and Gynaecology.

Paediatrics.

Otology, Rhinology, Laryngology.

Ophthalmology.

Preventive Medicine.

Pathology and Bacteriology.

The University will impose a minimum fee of \$25.00 per month. This will be imposed for any course of less than a month as a registration fee. Graduates attending courses will be charged a supply fee to cover the cost of materials or equipment supplied.

## SPECIAL GRADUATE COURSES

101. The Faculty is prepared to arrange special graduate courses in any particular field of Medicine provided the number of applications is sufficient.

## SHORT COURSES IN RADIOLOGY

102. In order to meet the needs of those graduates in medicine who desire short courses of instruction in Radiology, it has been arranged to provide courses of one month each at the Toronto General Hospital. Classes will be limited and an intensive schedule has been outlined to include:

- (a) Radiographic Technique.
- (b) Interpretation.
- (c) Gastro-Intestinal Examination.

In these courses the entire resources of this large clinic will be placed at the disposal of the student in the most practical manner possible.

For full information and terms apply to the Secretary of the Faculty of Medicine, University of Toronto.

## EXTENSION LECTURES

103. (a) The Medical Faculty have co-operated with the Canadian Medical Association in their scheme of Extra-mural post graduate medical education. During the past year 18 members of the Faculty have delivered 85 lectures to medical societies in different parts of the Dominion of Canada.

(b) By an arrangement with the Ontario Medical Association the Medical Faculty of the University has offered to the profession some 86 lectures on the most important subjects in various fields of medical science. Applications for these lectures may be made through the Secretary of the Ontario Medical Association (from whom a copy of the titles of the lectures may be obtained). Any society or group of physicians may apply for a course of lectures on any subject.

## 104. CURRICULUM FOR THE DIPLOMA OF PUBLIC HEALTH

1 The University provides a Diploma of Public Health (D. P. H.) on the following conditions:—

2. Candidates for the Diploma must be graduates in Medicine of this University or some other University recognized for this purpose by the Senate.

3. The curriculum leading to the Diploma extends over one Winter Session of eight months and one Summer Session of three months.

4. The Winter Session is devoted to:—

*Laboratory Courses and Lectures in:—*

- (a) Bacteriology and Serology.
- (b) Public Health Chemistry.
- (c) Parasitology.
- (d) Epidemiology and Vital Statistics.

*and to attendance at:—*

- (e) Clinics for Communicable Diseases.
- (f) Psychopathic Clinics.
- (g) Venereal Diseases Clinics.
- (h) Tuberculosis Clinics.
- (i) Well-Baby Clinics.
- (j) Ante-Natal Clinics.

*and to Lectures or Practical Work in*

- (k) Applied Physiology.
- (l) Sanitary Engineering.
- (m) Public Health Organization and Legislation.
- (n) History of Preventive Medicine.
- (o) Nutrition and Dietetics.
- (p) Industrial Hygiene.

The Department of Health of Ontario, the City Health Department of Toronto and the special Clinics at the Toronto General Hospital and the Hospital for Sick Children provide unusual facilities for instruction in the practice of Preventive Medicine.

5. The Summer Session may be spent under the supervision of a recognized Department of Health.

6. When the required courses of study have been completed, written and practical examinations will be held on the subjects of the curriculum specified in paragraph 4.

7. Candidates who have passed the examinations and who have satisfactorily completed the work specified in paragraph 5 will be granted the Diploma in Public Health.

8. The fee for the course, as outlined in paragraphs 3, 4 and 5, is \$200.00, payable in two instalments of \$100.00 each, at the beginning of the Fall Session, and the Winter Session respectively. The fee for the Diploma is \$20.00.

9. Candidates for the Diploma in Public Health are required to undertake the investigation of an assigned Public Health problem, complete the same and submit the results in the form of a report before being permitted to proceed to the examinations leading to the Diploma.

10. Graduates in Medicine, who for a period of two years have been engaged in full-time Public Health work, may, under the following conditions, take the examination specified in paragraph 6, when they have completed the courses required in paragraph 4.

The work required in the curriculum may be extended over a period of more than one academic year, and the examinations taken when all courses of study have been completed. A yearly fee of \$100.00 payable at the beginning of the Fall Term, must be paid by candidates taking more than one year to complete the required courses. (If only one year is taken to complete the work the fee is \$200.00).

11. Candidates who present satisfactory evidence of having completed work, the equivalent of that required in certain of the courses specified in paragraphs 4 and 5, may petition to be granted exemption from attendance on such courses. This will apply only in the cases of candidates who have been for at least two years engaged in full-time Public Health work, and who at the time of registration are so engaged.

12. The examination of those qualifying under clause 10 will be held in May and September, for others, in September only.

#### 105. CURRICULUM FOR THE DIPLOMA OF RADIOLOGY

The Faculty of Medicine, University of Toronto, has instituted a graduate course leading to a Diploma in Radiology.

Candidates for the Diploma are required to

- (a) Be graduates in Medicine of this University or some other University recognized for this purpose by the Senate.
- (b) Have spent at least one year after graduation as an interne in a recognized hospital.

The Curriculum leading to the Diploma extends over one Winter session of eight months.

*The session will be devoted to courses in:*

#### PHYSICS

The instruction in Physics will consist of three courses of lectures accompanied by practical work in illustrative experiments.

The lecture courses are as follows:

##### 1. *Radiation.*

In this course of lectures there will be discussed:

- (a) The origin of radiations, (b) the properties of various types of radiation, including infra red, ultra violet and visible rays;
- (c) absorption of radiations; (d) fluorescence and phosphorescence.

##### 2. *Electricity, Magnetism and Roentgen Radiology.*

This course of lectures will consist in the treatment of (a) the fundamental ~~idea~~ of charge electricity, difference of potential, electromotive force, capacity, current and inductance; (b) the effects of electrical currents with particular attention paid to electromagnetism and the application of the latter in various measuring instruments; (c) detailed study of the principles underlying motors, dynamos, and other instruments used in X-ray technique; (d) the properties of electrons—the production of X-rays, and the properties and quantitative measurements of these rays.

### 3. *Radioactivity.*

This course of lectures will consist of the (a) isolation of radioactive substances; (b) radiations (L.B. and X-rays) emitted by radioactive substances and quantitative measurements of these three types of rays; (c) properties of radioactive emanations from radium, thorium and actinium; (d) radioactive transmutations generally with applications to selected problems.

## RADIOLOGY

### (1) *Anatomy.*

A detailed study in normal Anatomy from a Radiological aspect in infancy, adult life and old age. The epiphyses: appearance of the skeleton from various angles together with many abnormalities which do not constitute pathological processes; the changes which normally occur in bones and joints with advancing age and in old age. The normal anatomy of the thoracic and abdominal viscera, etc.

### (2) *Pathology.*

A course in co-operation with the Department of Pathology in which a special study will be made of the pathology of all diseases which come within the range of X-ray and Radium methods either in diagnosis or treatment. In the latter a study will also be made of the histological changes brought about by X-ray or radium applications to various tissues.

### (3) *Technique.*

A complete course in the technique of Radiography. Ample facilities are provided for the student to personally carry out all procedures and to perfect himself in this side of the work. In the later part of his course he will be expected to take entire charge of one of the operating rooms.

### (4) *X-ray Interpretation.*

In addition to the daily routine of plate interpretation there is now a classified library of several thousand plates including nearly all the unusual and interesting cases to be met with and these will be studied systematically. There is also an almost unlimited collection of other plates which are available for study.

### (5) *X-ray Therapy.*

A complete course in Therapy is provided. This will include all aspects of this work from the superficial to the intensive use of voltages up to 250,000 together with the methods of measurement and calculation of all dosages. The material available for this study is very large and diversified.

(6) *Radium.*

A course in Radium Therapy which for the present is limited to the use of Radium element.

(7) *Short Courses in Medicine and Surgery.*

As in Pathology, so in Medicine, Surgery and Gynaecology, courses will be arranged in collaboration with those Departments for Systematic lectures and study of the various diseases or conditions under consideration in order that the student may be presented with the entire problem in its broader aspect.

Examinations on the subjects of the curriculum will be held at the end of the session.

Candidates who have passed the examinations and who present certificates of having satisfactorily completed the work specified will be granted the Diploma in Radiology.



## COURSES OF INSTRUCTION

## CHEMISTRY

*Professor of Organic Chemistry and Secretary of the Department of Chemistry:*  
F. B. ALLAN.

*Professor:* F. B. KENRICK.

*Professor of Physical Chemistry:* W. LASH MILLER.

*Associate Professor:* J. B. FERGUSON.

*Associate Professor of Electrochemistry:* J. T. BURT-GERRANS.

*Associate Professor:* L. J. ROGERS.

*Assistant Professors:* W. S. FUNNELL, W. H. MARTIN.

*Lecturer:* A. R. GORDON.

*Assistants:* F. M. ARCHIBALD, G. F. BROWN, A. F. COLE, J. CRYER,  
F. J. FARNCOMB, W. E. GRAHAM, H. R. HART, W. A. IRVINE, G.  
MACKINNEY, W. E. MATHER, L. L. PERKIN, H. DESB. SIMS, H. C.  
SMITH, E. M. SPARLING, B. WAUGH, MISS H. STANTIAL.

All lectures and practical work will be given in the Chemistry Building.

## FIRST YEAR

*Lectures.*—Students attend a course of experimental lectures delivered twice a week in the lecture theatre. This course embraces the study of the non-metallic and metallic elements and their principal compounds based on Mendelejeff's classification of the elements.

*Practical Chemistry.*—The laboratory work commences with quantitative and qualitative experiments illustrating the fundamental principles of chemistry; this is followed by work more intimately related to analytical chemistry. Instruction in quantitative methods of analysis is given.

## SECOND YEAR

*Lectures.*—A course of lectures on the systematic classification of organic compounds and on elementary physical chemistry, twice a week.

*Practical Chemistry.*—A special laboratory course to accompany the above lecture course will be given during the Easter Term.

*Option.*—This is a course in volumetric analysis.

Students working in the laboratory are provided with the necessary apparatus on making a deposit of five dollars at the commencement of the session, which will be returned at its close after the following charges have been deducted from it—

- (1) The cost of all apparatus broken or destroyed.
- (2) Any fines for breach of laboratory rules.

No certificate will be given for the practical work unless the student has passed the practical examinations conducted during the session.

*Text-books*.—Smith's General Chemistry, Kendall; Organic Chemistry, Norris; Physical Chemistry for Physicians and Biologists, Cohen and Fischer; An Elementary Laboratory Course in Chemistry, Kenrick and DeLury.

*Reference Text books recommended*.—Inorganic Chemistry, Richter; Organic Chemistry, Richter.

## PHYSICS

*Professor and Director of the Physical Laboratory*: J. C. McLENNAN.

*Professors*: E. F. BURTON, JOHN SATTERLY.

*Associate Professors*: LACHLAN GILCHRIST, H. A. McTAGGART.

*Demonstrators*: COLIN BARNES, MISS K. M. CROSSLEY, H. J. C. IRETON, A. B. McLAY, M. J. LIGGETT, W. G. PLUMMER, MISS B. M. REID, H. G. SMITH, N. S. TAYLOR.

*Assistant Demonstrators*: MISS E. J. ALLIN, MISS M. C. McDONALD, W. J. P. MILLS, MISS M. E. WESTMAN.

*Secretarial Assistant*: MISS A. T. REED.

The work of instruction on Physics consists of a series of lectures and a course in practical work in the laboratories.

### FIRST YEAR

*Lectures*.—The lectures on Physics will not only give a concise outline of the subject, but are intended to form a satisfactory foundation for future study in other branches of science.

A course of twenty-five lectures on Practical Mathematics and Mechanics will be given during the year. These lectures, which will be illustrated by many problems, will deal in a systematic way with mechanics, use of curves, logarithms, etc.

There will be four lectures in Physics per week during the year of which two lectures bear directly on the practical work assigned to the student, while the other two lectures are part of a course dealing more particularly with the principles of Physics of special use to students of Medicine. The following is an outline of the work covered:

#### I. APPLIED MATHEMATICS AND CALCULATIONS. THEORY OF MEASUREMENTS.

Calculations of experimental results to show limits of accuracy: contracted methods: logarithms.

Trigonometrical ratios defined, and simple relations deduced; reading of tables of sines, cosines and tangents.

Graphical methods; equations to straight line and parabola; logarithmic curves; deduction of simple formulae from graphs; slope of curves from graphs.

Simple ideas involved in the calculus; illustration of velocity of a falling body from  $s = \frac{1}{2} gt^2$ .

Statistical Methods. Deviation, Dispersion, the Frequency Curve, Probable Error, Correlation, introduction to Biometrics.

## 2. MECHANICS.

Measuring instruments, length, volume; verniers, micrometers.

Forces: conditions of equilibrium; resolution of forces, moments; centre of gravity; levers and simple machines.

Velocity; acceleration, momentum, force, work and power; absolute and practical units in English and metric systems; mass and weight; value of 'g'.

Energy, kinetic and potential; transmutation of energy; law of conservation of energy.

Simple harmonic motion; the pendulum; combination of two motions perpendicular to each other; Lissajous figures; Blackburn's pendulum.

## 3. HYDROSTATICS AND HYDROMECHANICS.

Laws of pressure in fluids at rest; Pascal's Law and Archimedes' principle; specific gravity; the hydrostatic paradox; resultant vertical forces on walls, manometers, barometers, mercury and aneroid; Bramah's press; pumps.

Archimedes' principle in air; weight of atmosphere.

Laws of pressure in fluids in motion; Bernoulli's principle; applications such as atomizer, Bunsen burner, filter pump; action of air in winds and curving of balls in flight.

## 4. PROPERTIES OF MATTER.

Principles of the kinetic theory of matter; structure of solids, liquids and gases; diffusion; molecules and molecular forces.

Elastic properties of solids; bulk modulus, torsion modulus or rigidity, Young's modulus; micro-photographic study of metals; crystallization.

Viscosity of fluids; velocity gradient; coefficient of viscosity; Poiseuille's law for tubes; experimental determination of coefficient; Ostwald viscometer; viscosity and temperature; relation to blood flow; capillaries.

Surface tension; experimental illustrations, definition of coefficient and determination of same; energy of surface; shapes of free surfaces.

Laws of gases; theoretical determination of pressure,  $p = \frac{1}{3} mn \bar{v}^2$ ; Boyle's Law; Charles' Law; laws of diffusion.

Change of state; solid to liquid, liquid to gas; vapour pressure, with measurement; relation to temperature; vapour density; liquefaction of gases; critical temperature and pressure; low temperatures.

Colloidal solutions; size of particles; physical properties; mobility; coagulation by electrolytes; Brownian movement and its molecular explanation; confirmation of the kinetic theory; dialysis; relation to body fluids and membranes.

## 5. HEAT.

Expansion of solids, liquids and gases; thermometers; Centigrade and Fahrenheit scales; absolute scale; maximum and minimum thermometers; clinical thermometer.

Capacity for heat; calorie; specific heats; latent heat of vaporization and fusion; calorimetry.

Heat as energy; mechanical equivalent of heat; Joule's law.

Vapour pressure; vapour density; dew point; various forms of hygrometers; relative humidity.

Radiation; laws of cooling; wave length of heat radiations; transmission of energy through space. Conduction.

## 6. ACOUSTICS.

Production, propagation and recording of sounds; characteristics of a note, pitch, intensity and quality; definition of wave length; determination of velocity;  $V = n\lambda$ ; resonance; stationary waves; organ pipes; laws of strings; membranes; voice production, structure of ear; interference of sound waves; beats and beat tones; absorption and reflection of sound; musical scales.

## 7. ELECTRICITY AND MAGNETISM.

The fundamental phenomena associated with electrified bodies and the laws of the action of electrical charges. The methods of measurement of electrical charge, current, potential, capacity, resistance, conductance and the definition of the units of these quantities in the electrostatic, practical and electromagnetic systems.

The construction and action of the instruments used in measuring electrical quantities and the methods of calibrating them. These instruments include galvanometers, ammeters, voltmeters, electrometers, potentiometers and wattmeters.

The properties of liquid conductors, and the measurement of their conductivity. Faraday's laws of electrolysis and the method of determination of the electro-chemical equivalent.

The properties and laws of action of magnets and of the magnetic fields associated with a circuit bearing a current, the method of measuring magnetic mass and magnetic field intensity and the definition of the units of these quantities.

The method of production, the properties and the measurement of induced currents of varying frequencies and their application.

The discharge of electricity through gases, and the factors upon which their conductivity depends, the properties and uses of anode, cathode and X rays.

The methods of investigating and identifying radioactive substances. The properties of radioactive radiations and their uses.

#### 8. LIGHT.

The electron as a source of light waves—nature of the waves—their velocity in free space, water and glass—their reception by the eye. Analogies in sound and wireless signalling.

Reflection of waves from plane and spherical mirrors—focal lengths of spherical mirrors—images—optical diagrams.

Refraction of waves at a plane surface—index of refraction—the critical angle—methods of finding the index. Refraction of waves at a spherical surface—foci and focal lengths—the diopetre—power of a lens—images—optical diagrams.

*The eye.*—Diagram of the eye—accommodation—the normal, myopic and hypermetropic eye—the far point—lens necessary to correct myopia and hypermetropia—astigmatism.

*Optical instruments.*—The reading lens, compound microscope, telescope, prism binoculars.

*Colour.*—Variation of refractive index with colour—deviation of light by a prism—dispersion—kinds of optical glass manufactured—achromatic pair of prisms—direct vision spectroscope—colour blindness.

*Spectroscopy.*—Emission spectra of solids, liquids and vapours or gases—spectrum analysis—absorption spectra—range of ether waves from infra red to ultra violet waves and X-ray waves.

*Polarised light.*—Polarisation by reflection, by refraction, by natural crystals—the Nicol prism—rotation of the plane of polarisation, the polarimeter.

*Interference.*—Interference of waves—colours in thin films.

#### 9. PRACTICAL WORK.

The Practical Work, consisting of a laboratory course of four hours each week designed to illustrate the principles dealt with in the lectures, will be conducted under the supervision of the Director of the Laboratory.

*Text-books:* Merchant and Chant, "Mechanics for the Upper School" (Copp Clark); Stewart and Satterly, "Senior Heat" (Univ. Tutorial Press); Duncan and Starling, "Light and Sound" (Macmillan & Co.); S. G. Starling, "Elementary Electricity" (Longmans, Green & Co.); Tuttle and Satterly, "Theory of Measurements" (Longmans, Green & Co.).

## OPTIONAL COURSES IN PHYSICS

In accordance with the plan outlined by the faculty optional courses in Physics are offered in years succeeding the first, as follows:

## SECOND YEAR

*Advanced Electricity and Magnetism, 60 hours.*..PROFESSOR E. F. BURTON  
(Limited to 30)

This course is designed to follow on the work in electricity and magnetism of the first year and to form a necessary introduction to the work in Radiology of the Third Year. The lectures and experimental demonstrations will deal with the following features:

- (1) The exact measurement of electromotive forces and current, including treatment of advanced forms of potentiometer and electrometers.
- (2) An account of the main phenomena of alternating currents, and various forms of varying currents, measurement of self-induction and allied quantities.
- (3) An introduction to the special phenomena exhibited in the conduction of electricity through liquids and gases, ionization and dissociation.

## THIRD YEAR

In this year the Department offers two courses, *one* of which may be chosen.

A. *Radiation, Radioactivity and Radiology, 60 hours.*..PROFESSOR J. C. McLENNAN  
(Limited to 15)

The purpose of this course is to give the student a broad working knowledge of the scientific principles at the basis of treatment by various light radiations, radium rays and emanation, X-rays and high frequency currents. The properties of these physical quantities will be studied and the instruments involved in their production demonstrated and explained. The course in the Second Year is a pre-requisite for this course.

B. *Colloidal Solutions and the Theory of Conduction of Electricity through liquids, 60 hours.*.....PROFESSOR E. F. BURTON  
(Limited to 15)

The first half of the course will deal with the laws of electrolysis, the theory of partial dissociation and its relation to vapour pressure, freezing point and boiling point determination, and osmotic pressure; the recent Debye theory of complete dissociation; definition and determination of hydrogen ion concentration. The second half will consist of lectures followed by lecture demonstrations on the physical and chemical properties of colloidal solutions, including their preparation, the ultramicroscope, the Brownian movement, and the laws of coagulation of electrolytes.

FOURTH YEAR

*Acoustics and Optics.*

I. *Acoustics*.....PROFESSOR BURTON

A course of thirty hours lectures and demonstrations in advanced acoustics.

II. *Optics*.....PROFESSOR McTAGGART

A course of thirty hours lectures and practical demonstrations on advanced optics.

REGULATIONS.—Deposit Fee: Each student taking the laboratory course is required to make a deposit of three dollars (\$3.00) before beginning work. All supplies, apparatus broken or destroyed and all fines will be charged against this deposit, which must be renewed when exhausted. At the close of the session cash balances will be returned on a day appointed for the purpose.

BIOLOGY

*Professor of Zoology:* B. A. BENSLEY.

*Professor of Histology and Embryology:* W. H. PIERSON.

*Associate Professor of Invertebrate Zoology:* E. M. WALKER.

*Associate Professor in Vertebrate Embryology:* A. F. COVENTRY.

*Assistant Professor in Experimental Biology and Genetics:* J. W. MAC-ARTHUR.

*Assistant Professor in Mammalian Anatomy:* W. H. T. BAILLIE.

*Assistant Professor in Comparative Anatomy and Neurology:* E. H. CRAIGIE.

*Class Assistants:* C. C. BROWN, J. T. MCCOSH, A. E. MCCULLOCH, E. L. SEXSMITH, D. FINDLAY, A. L. PRITCHARD.

FIRST YEAR

*Lectures.*—1. Students of the First Year will attend a course of ninety lectures to be given three times a week during the session. The lectures will serve as an introduction to the biological fields in relation to medicine. The topics include (1) the general nature of living organisms and of cell processes, (2) the types of lower organisms of interest to students of Medicine, (3) an introduction to the anatomy and development of the mammalian organ systems, and (4) biological principles as applied to man.

*Practical Work.*—2. A course of one hundred and eighty hours, comprising two three-hour periods per week, the materials of which are based as far as possible on Lecture course I. The work comprises microscope practice, elementary experimental studies on the nature of cell processes, types of lower organisms, and a selected list of vertebrates, including the elements of mammalian anatomy.

## SECOND YEAR

1. *Option*.—A course on the principles of evolution, heredity and eugenics in relation to medical and sociological problems.

## THIRD YEAR

1. *Option*.—A course of seventy-five hours laboratory work on embryology, including technique, with special reference to the problems of mammalian embryology.

2. *Option*.—A course of seventy-five hours laboratory work on advanced histology and cytology, including technique.

3. *Option*.—A course of lectures and laboratory work on the structure and life history of animal parasites, particularly those which infest man.

4. *Option*.—A co-operative course of lectures and conferences dealing with current biological literature and problems.

5. *Option*.—A course of lectures and laboratory work on the structure and development of the vertebrate nervous system.

*Text-books:* Biology: O'Donoghue, Shull, Borradaile, McFarland, Bigelow, Parker.

Embryology: McMurrich, Development of Human Body; Bailey and Miller, Textbook of Embryology; Arey, Developmental Anatomy; Jordan and Kindred, Embryology.

Mammalian Anatomy: Bensley, Practical Anatomy of the Rabbit.

Histology: Jordan, Text-book of Histology; Schäfer, Text-book of Microscopic Anatomy (Quain's Anatomy, 11th edition; vol. II, pt. 1); Lee, Microtome's Vade Mecum, 8th ed.; Sharp, Introduction to Cytology, Bailey, Strong and Elwyn, Textbook of Histology.

Parasitology: Chandler, Animal Parasites and Human Disease.

Heredity: Morgan, The Physical Basis of Heredity.

For special reading students may consult the printed reading list of the Department of Biology.

## RELATION OF SCIENCE TO CIVILIZATION

PROFESSOR H. WASTENEYS

" J. P. McMURRICH

" A. F. COVENTRY

## FIRST YEAR

*Lectures*.—The greater part of the assigned time of 60 hours will be devoted to a course of lectures designed to illustrate the influence which scientific thought and achievement have had on the development of modern civilization. The lectures will be given jointly by several lecturers, but the course as a whole will be under the general direction of Professor Wasteneys.



## ENGLISH EXPRESSION

*Instructors:* E. L. DANIEL, J. F. VANEVRY

## FIRST YEAR

*Tutorial Classes*—In this course instruction will be given in the correct use of written and spoken English, and opportunity will be afforded each student to acquire experience in public speaking.

In order that the instruction may be as thorough as possible, the class will be divided into several groups, each of which will meet once a week.

## PHYSIOLOGY (INCLUDING GENERAL PHYSIOLOGY)

*Professor of Physiology:* J. J. R. MACLEOD.*Associate Professors of Physiology:* J. M. D. OLMSTED, N. B. TAYLOR.*Demonstrator:* I. L. CHAIKOFF.*Fellows:* W. R. CAVEN, H. S. COULTHARD, S. SOSKIN, J. J. WEBER.*Pari-time Fellows:* W. S. KEITH, J. M. HARVEY.*Librarian:* MISS M. GRANGE.*Secretarial Assistant:* MISS M. E. ARMOUR.

The following courses of instruction each extending throughout the session are offered.

1. Systematic lectures; three a week during term:
  - a. General and neuro-muscular physiology.
  - b. Physiology of circulation, respiration, digestion and secretion.
  - c. Metabolism, the functions of the ductless glands and reproduction.
  - d. Physiology of the central nervous system and special senses.
2. Lectures in General Physiology.
3. Advanced lectures; two a week (optional).
4. General laboratory courses (total of 180 hours).
  - a. Neuromuscular Physiology.
  - b. Circulation, respiration and digestion.
  - c. Nervous system and special senses.
  - d. Reviews and Conferences.
5. Laboratory course in General Physiology.
6. Advanced laboratory courses (optional).
7. Research in Physiology.
8. Journal Club; one hour a week.
9. Optional course Laboratory work in selected parts of subject (available to students of the fourth and subsequent years in the Medical faculty).
10. History of Physiology. A course of lectures supplemented by discussions towards which the students contribute.

## 11. Physiology for dental students (see Dental Calendar).

Every student must attain a certain standard in the laboratory exercises before he will be allowed to proceed to the University examinations in Physiology.

Throughout the Session oral and, as may be necessary, written examinations will be held to ascertain the extent of the student's knowledge of Physiology, and the results of these, as well as his general work in the laboratory will be used to determine his position in the University Class Lists.

In the laboratory courses the students will be required to make good all loss through breakage or otherwise.

*Text-books*:—Manual of Physiology, G. N. Stewart; Physiology and Biochemistry in Modern Medicine, J. J. R. Macleod; Starling's or Howell's Physiologies; Bayliss' General Physiology; Luciani's Physiology; Roaf's Physiology; Monographs in Physiology (edited by B. H. Starling). *Works of Reference*:—Other works important for consultation are Marshall's Physiology of Reproduction; Schäfer's Endocrine Organs; Text-Book of Physiology (edited by E. A. Schäfer); Lovatt Evans, Recent Advances in Physiology; C. S. Sherrington, Mammalian Physiology.

Students are urged to become members of the Students' Medical Library from which they may borrow, for home reading, books and monographs bearing on the subject of Physiology.

## BIOCHEMISTRY

*Professor of Biochemistry*: ANDREW HUNTER.

*Professor of Biochemistry*: HARDOLPH WASTENEYS.

*Associate Professor of Zymology*: H. B. SPEAKMAN.

*Demonstrator in Biochemistry*: MISS J. MCFARLANE.

*Fellows*: J. A. DAUPHINEE, MISS V. DUNBAR, D. A. MACFADYEN.

*Assistants*: A. M. GOULDING, W. B. EDMONDS.

*Secretarial Assistant*: MISS M. DELAMERE.

The following are the Courses of Instruction in this department for students of Medicine.

## THIRD YEAR

*Lectures*.—A course of lectures—three a week—covering in an elementary way the general field of Biochemistry.

*Laboratory*.—A laboratory course in Biochemistry, six hours weekly in the Michaelmas term, three in the Easter term.

*Tutorial*.—One hour weekly, reviewing and supplementing in the main the work of the laboratory.

## FOURTH AND FIFTH YEARS

*Optional.*—A laboratory and lecture course, of two to five hours a week, dealing with one or more of the following topics: (1) the principles of nutrition; (2) hydrogen ion concentration and its importance in biology; (3) the action and properties of enzymes.

Students in the laboratory are required to make at the beginning of each course a deposit to cover the cost of possible breakage or loss of the apparatus with which they are supplied. The deposit for the third year is three dollars. The unused residue of this deposit is returned at the end of the term.

Every student must attain a certain standard in the laboratory exercises before he will be allowed to proceed to the University examinations in Biochemistry.

Throughout the Session oral and, as may be necessary, written examinations will be held to ascertain the extent of the student's knowledge of Biochemistry and the results of these as well as his general work in the laboratory, will be used to determine his position in the University Class Lists.

In the laboratory courses the students will be required to make good all loss through breakage or otherwise.

*Text-Books and Works of Reference:*

(a) *Elementary or General:*—Hammarsten, Text-book of Physiological Chemistry; Abderhalden-Hall, Text-book of Physiological Chemistry; Mathews, Text-book of Physiological Chemistry; Robertson, Principles of Biochemistry.

(b) *Advanced or Special:*—Monographs on Biochemistry, edited by Plimmer and Hopkins; Robertson, Physical Chemistry of the Proteins; Taylor, Digestion and Metabolism; Lusk, Science of Nutrition; Efront, Biochemical Catalysts in Life and Industry; Euler, General Chemistry of the Enzymes; Abderhalden, Biochemisches Handlexikon; Neuberg, Der Harn.

*Laboratory Handbooks:*

(a) *Elementary:*—Plimmer, Practical Organic and Biochemistry; Hawk, Practical Physiological Chemistry; Folin, Laboratory Manual of Biological Chemistry; Halliburton, Essentials of Chemical Physiology; Cole, Practical Physiological Chemistry; Rockwood's Laboratory Manual of Physiological Chemistry.

(b) *Advanced:*—Abderhalden, Handbuch der biochemischen Arbeitsmethoden; Ellinger, Analyse des Harns.

## ANATOMY

*Professor and Director of the Anatomical Department:* J. PLAYFAIR  
McMURRICH.

*Professor of Histology, Embryology and Anatomy:* W. H. PIERSOL.

*Associate Professors in Anatomy:* J. C. WATT, E. A. LINELL.

*Assistant Professor of Anatomy:* H. A. CATES.

*Assistants in Anatomy:* H. G. WILLSON, A. SKINNER.

*Demonstrators in Anatomy:* W. E. L. SPARKS, D. M. MEEKISON, A. R.  
HAGERMAN, A. E. MONTGOMERY, G. L. CHAMBERS, L. M. MURRAY.

*Demonstrators in Histology and Embryology:* H. D. BALL, J. M. MAC-  
DONALD, A. G. MCPHEDRAN, F. J. SNELGROVE, F. J. BELL, A. H.  
NEEDLER, L. A. SMITH.

*Research Assistant:* MARY I. TOM.

*Museum Preparator*—B. L. GUYATT.

*Richardson Research Fellow:* C. HELEN CRAW.

*Secretarial Assistant:* MISS G. H. DOWSLEY.

## REQUIRED COURSES

## SECOND YEAR

**Course 1. *Gross Anatomy.***—During the Second Year each student is obliged to dissect thoroughly various regions of the body, following the plan outlined in a "Guide to the Dissection of the Human Body". Members of the staff will be in attendance each day for the purpose of superintending the work and of giving instruction, and will hold frequent examinations with the object of testing the student's progress. Certificates of credit in Practical Anatomy will be granted only to those students whose work has been completed to the satisfaction of the instructors in charge.

The Laboratory will be open from 9 a.m. until 5 p.m. every week-day through the session, with the exception of Saturdays when it will be closed at 12 noon.

In connection with the laboratory work lectures will be given by members of the staff, reviewing the work that has been completed. The object of these lectures will be to supplement the work in the Laboratory by calling attention to the relations and significance of the parts that have been studied and by elucidating with the aid of diagrams and models the anatomy of difficult and important structures.

**Course 2. *Histology and Embryology.***—During the Second Year a course of sixty lectures and two hundred hours laboratory work is given on the development of the body and its tissues, and on the microscopic anatomy of its organs.

## THIRD YEAR

Course 3. *Neurology*.—During the Third Year a course of lectures will be given on the Anatomy of the Central Nervous System.

In connection with the above course of lectures the class will be divided into small sections, to each of which a Demonstrator will be assigned, for the purpose of a practical study of the Anatomy of the Brain.

Course 4. *Gross Anatomy*.—Throughout the whole Third Year dissection will be carried on in order to complete the study of those regions which were not dissected during the Second Year. During the Easter Term of the Third Year a course of lectures will be given dealing with the anatomy of special regions or organs. This course is intended to be supplemental to Course 1, attention being given to the practical applications of the structure and regional anatomy of the parts considered.

## OPTIONAL COURSES

These courses are designed for those students who may desire a more intensive study of certain systems or organs than is afforded by the required course. They are open to those who have completed the second, or in some cases, the third year of the Medical Course. All the courses listed will not be offered in any one year, but selections will be made from them according to the demand and to the facilities of the Laboratory. The time required for each course will be the equivalent of two hours per week throughout the year.

Course 5. *General Gross Anatomy*.—This course is designed to give opportunity for a review of the Gross Anatomy of the Human Body. It is based largely on the study of sections and is open to students who have completed the *third* year of the Medical Course.

Course 6. *Special Gross Anatomy*.—This course is a continuation and further elaboration of the regular courses in Gross Anatomy and Neurology. It is offered to a limited number of students, the part dealing with Gross Anatomy to those who have completed the third year of the Medical Course; that in Neurology only to students of the fourth year. The two parts of the course may be elected separately.

Course 7. *Embryology*.—A course of seventy-five hours laboratory work (including technique) with special reference to the problems of mammalian and human embryology. Open to students who have completed the *second* year of the Medical Course.

Course 8. *Cytology*.—A course of seventy-five hours laboratory work on advanced vertebrate histology and cytology, including technique. Open to students who have completed the *second* year of the Medical Course.

Course 9. *Anatomy of the Joints*.—A study of the anatomy and actions of the joints, with especial reference to the anatomy of dislocations. Open to students who have completed the *third* year of the Medical Course.

Course 10. *Anatomy of the Digestive System*.—This course will include an intensive study of the development, minute structure and gross anatomy of the organs of the digestive system. The complete course will extend throughout two years, but either portion of it may be elected. Open to students who have completed the *second year of the medical course*.

Course 11. *The Anatomy of the Sense Organs*.—Intended especially for those who intend to specialize in Ophthalmology and Oto-laryngology. Open to graduates in Medicine and to students who have completed the *fourth year of the Medical Course*.

Course 12. *Research Course*.—Opportunities will be afforded properly qualified students for carrying on investigation in anatomical problems. Arrangements for this Course must be made with the Professor of Anatomy.

*Text-books*:—Piersol; Gray; Morris; Cunningham's Text-book; Guide to the Dissection of the Human Body for the use of Students in the Anatomical Laboratory of the University of Toronto; Jordan, Text-book of Histology; Bailey, Text-book of Histology; McMurrich's Development of the Human Body; Bailey and Miller, Text-book of Embryology; Jordan and Kindred, Embryology; Arey, Developmental Anatomy; Ranson, Anatomy of the Nervous System.

*Reference Text-books*:—Spalteholz, Hand-Atlas of Human Anatomy; Toldt's Atlas of Human Anatomy; Sobotta's Atlas and Text-book of Human Anatomy; Eycleshymer and Shoemaker, Cross-Section Anatomy; Quain's Anatomy; Barker's The Nervous System; Buchanan, Manual of Anatomy; Johnston, Nervous System of Vertebrates; Villiger, Brain and Spinal Cord; Herrick, Introduction to Neurology; Tifney and Riley, The Form and Functions of the Nervous System; Von Bardeleben's Handbuch der Anatomie; Rawlings, Landmarks; Treves, Applied Anatomy; Davis, Applied Anatomy; Beesley and Johnston, Surgical Anatomy; Whitnall, Anatomy of the Human Orbit; Schaffer, Anatomy of the Nose; Schafer, Microscopic Anatomy (in Quain's Anatomy, 11th edition, Vol. II, Part 1); Keibel and Mall, Human Embryology; Lee, Microtome's Vademecum, 8th edition.

## PHARMACY AND PHARMACOLOGY; MATERIA MEDICA

*Professor:* V. E. HENDERSON.

*Assistant Professor of Pharmacology:* G. H. W. LUCAS.

*Fellow:* M. I. SPARKS.

*Class Assistants in Pharmacy:* J. A. MACDONALD, J. L. C. NORNABELL,  
K. MULDOON.

*Secretarial Assistant:* MISS D. MANNING.

## THIRD YEAR

Two courses of laboratory work accompanied by lectures and laboratory talks are given.

*Practical Work.*—LABORATORY COURSE I. Experimental pharmacology. In this course the student obtains an opportunity to become familiar with representatives of the drug-stuffs composing the various pharmacological groups. The chief object of the course is to get the student into the habit of accurate observation of the effects produced by drugs and to be able to describe them in accurate pharmacological language. In consequence a great deal of attention is given to the note books kept by each student. The course is accompanied by many mammalian demonstrations. The tracings of all demonstrations are analysed by each student.

LABORATORY COURSE II. Practical Pharmacy. This course is very brief, consisting only of a few hours' work on the chemical and physical incompatibles and in dispensing several mixtures, pills and ointments, in order that the student may obtain such insight into dispensing as is necessary to enable him to write prescriptions intelligently.

Total of these two courses, 90 hours.

Arrangements have also been made with the Toronto General Hospital, the Hospital for Sick Children and the Western Hospital, by which the students of this year will be drafted in turn to act as Assistants in the Hospital Dispensaries for a period of a week.

*Lectures.*—A course of lectures on general pharmacology (35 in all). This course is designed to supplement and extend the knowledge gained in the laboratory and from the prescribed text-book.

*Prescription Writing.*—Each student is expected to hand in answers to the problems in prescription writing announced each week. These are corrected and returned, and opportunity is given for the discussion of any difficulties, with the staff during laboratory hours. Informal talks are also given from time to time as needed.

*Text-books:*—Pharmacy and Materia Medica, Henderson; Pharmacology, Dixon; Applied Pharmacology, A. J. Clark.

*Reference Text-books:*—Pharmacology, Cushny, Gottlieb and Meyer, Solmann, Bastedo; Prescription Writing:—Bennett, Medical and Pharmaceutical Latin; Eggleston, Prescription Writing.

## TOXICOLOGY

*Professor of Pharmacology:* V. E. HENDERSON.

A course of ten lectures is given dealing with the pathology, pharmacology, symptomatology and treatment of the more important poisons which are commonly the cause of either forensic or industrial cases of poisoning.

## MEDICINE

*Emeritus Professor of Medicine:* ALEXANDER MCPHEDRAN.

*Professor of Medicine:* DUNCAN GRAHAM.

*Associate Professor of Medicine:* WILLIAM GOLDIE.

*Assistant Professors of Medicine:* F. A. CLARKSON, G. HOWLAND (in charge of Neurology), J. OILLE, D. KING SMITH (in charge of Dermatology), G. S. YOUNG.

*Associates in Medicine:* W. R. CAMPBELL, J. H. ELLIOTT, H. S. HUTCHISON, J. D. LOUDON, H. C. PARSONS.

*Senior Demonstrators in Medicine:* R. G. ARMOUR, G. F. BOYER, A. H. W. CAULFIELD, E. E. CLEAYER, H. K. DETWEILER, H. A. DIXON, A. A. FLETCHER, N. B. GWYN, B. HANNAH, R. A. JAMIESON, A. J. MACKENZIE, A. G. MCPHEDRAN, J. H. MCPHEDRAN, W. F. MCPHEDRAN, L. MURRAY, W. E. OGDEN, T. J. PAGE, F. W. ROLPH, C. SHEARD, E. J. TROW.

*Junior Demonstrators in Medicine:* G. H. AGNEW, G. BATES, E. A. BROUGHTON, J. HEPBURN, T. OWEN, F. S. PARK, D. J. PRENDERGAST.

*Research Fellows:* R. B. STEWART, M. J. WILSON.

*Fellow in Medicine:* R. F. FARQUHARSON,

*Clinical Microscopy* { *Senior Demonstrator:* G. W. LOUGHEED.  
                                  { *Junior Demonstrator:* E. S. JEFFREY.

*Technical Assistants:* MISS M. HANNA, MISS T. GREEN.

*Secretarial Assistant:* MISS S. H. CLUTTON.

## FOURTH YEAR

*Lectures:*—Two lectures are given weekly during the session on methods of physical examination, the explanation and interpretation of physical signs and history taking. The course is concluded by an introduction to the study of Medicine, dealing with the physiological aspects of disease. One lecture is given weekly on Applied Anatomy.

*Clinics:*—The class is divided into small groups, each of which is in charge of a clinician who instructs a different group each trimester. Practical instruction is given four hours a week in methods of physical examination and history taking in the wards of the hospital.

*Clinical Microscopy:*—One lecture is given weekly throughout the session on Clinical Microscopy. Once a week, during the session, each



group of students receives practical instruction in the laboratory in blood counting and the microscopical examination of blood, urine, faeces, stomach contents, sputum, cerebro-spinal fluid, transudates and exudates.

Instruction in bed-side clinics and in clinical microscopy follows as closely as possible the work discussed in the lectures of the previous week.

*Instruments:*—Students beginning clinical work are strongly advised to supply themselves with the following instruments: Stethoscope, Tape Measure, Dermograph, Haemocytometer (Bürker-Neubauer), Haemoglobinometer (Dare or Sahli), Thermometer, Head-mirror, Ophthalmoscope, Laryngoscope, Microscope with Condenser and Oil Immersion Lens.

Special arrangements have been made for obtaining these instruments (See Page 17).

*Text-books:* Physical Diagnosis, Cabot, Rose; Clinical Methods, Hutchison and Rainy; Clinical Laboratory Diagnosis, Morris, Emerson, Wood; The Examination of the Patient, Foster; Medicine, Osler and Macrae, Stevens, Taylor and Poulton; Tidy; Pathological Physiology, Hewlett; Respiratory Function in Disease, Meakins and Davies.

#### FIFTH YEAR

*Lectures:*—A weekly lecture is given on the different types of disease. One lecture is given weekly on Applied Anatomy.

*Clinics:*—The class is divided into small groups for clinical instruction in the wards of the hospital. Three bed-side clinics on different types of disease are given weekly throughout the session. The students devote three hours weekly to taking histories, examining patients and carrying out the clinical laboratory investigation of their cases under the direction of the Staff.

A weekly clinic is held in the hospital amphitheatre, at which selected cases illustrating different types of disease are presented.

Groups consisting of one-sixth of the Year attend, twice a week for a period of ten weeks, clinical demonstrations on Infectious Diseases at the City Isolation Hospital and the Hospital for Sick Children.

During the session each student is required to prepare at least three complete records of medical cases. These records must be certified as satisfactory by the clinician in charge of the clinic of which the student is a member.

#### SIXTH YEAR

In the Final Year the class is divided into three groups—Medicine, Surgery and Specialties. For a period of ten weeks each group devotes its whole time to Clinical Medicine.

Under the supervision of the Staff each student takes charge of a certain number of cases in the wards of the hospital. He is required to take a clinical history, make a complete physical examination and a routine laboratory examination of each case under his charge, and follow its progress and treatment while in hospital.

The class in Clinical Medicine is divided into smaller groups for bed-side instruction and work in the Medical Out Patient Department. Four bed-side clinics are given weekly at which students report the examination of the cases under their charge. This is followed by a clinic on the diagnosis, progress and treatment of selected cases.

Each clinic group attends the Medical Out Patient Department twice a week. Here the student is responsible for taking a clinical history and making a physical examination of all new cases. Upon the completion of this examination a member of the Staff discusses with him the diagnosis and treatment of the case.

Through the Social Service Department of the Hospital the Staff obtains information as to the social, hygienic and economic conditions of the patients' homes, which is of the greatest value in the diagnosis and treatment of individual cases. With their assistance homes are visited, abnormal home conditions remedied and patients discharged from hospital are encouraged to return for periodic examinations. In this manner the student is afforded an opportunity of observing the effects of social hygienic and economic factors in the development of disease and in its treatment.

Two theatre clinics are given weekly to all students of the Final Year at which cases are presented and the diagnosis, prognosis, prevention and treatment of various diseases discussed.

*Special Lectures and Clinics:*—The general course of clinical instruction in Tuberculosis, Venereal Disease and Diseases of the Skin is supplemented by special lectures and clinics.

*Tuberculosis:*—Ten lectures are given on the diagnosis, prognosis, prevention and treatment of tuberculosis. Each student attends nine Out Patient clinics on tuberculosis—six at the Toronto General Hospital and three at the Hospital for Sick Children. Both in lectures and clinics particular attention is paid to the early diagnosis of pulmonary tuberculosis, the examination of contacts, the methods for the prevention of the disease and its treatment in the home or sanitarium.

*Diseases of the Skin:*—In addition to six lectures on diseases of the skin each group in the Final Year attends fifteen Out Patient clinics on adults and five on children.

*Venereal Disease:*—Three lectures are given on the prevention and general principles of treatment of venereal disease, and the functions of a Venereal Clinic. Each clinic group attends in rotation five special Out Patient clinics on syphilis and takes part in the examination and treatment of cases.

*Clinical Pathological Conference:*—A weekly clinical pathological conference is held, at which students are required to report the results of their clinical examination of fatal cases under their care. This is followed by a demonstration of the autopsy specimens and a discussion of the clinical and pathological findings.

FIFTH AND SIXTH YEARS

*Text-books:* Diseases of the Chest, Norris and Landis; Principles and Treatment of Heart Affections, Mackenzie; Facts on the Heart, Cabot; Clinical Disorders of the Heart-beat, Lewis; The Soldier's Heart and the Effort Syndrome, Lewis; Diseases of the Digestive Canal, Cohnheim; Gastric Function in Health and Disease, Ryle; Clinical Examination of the Nervous System, Krohn; Diseases of the Nervous System, Purves-Stewart, Thomson; Diabetes mellitus, Joslin; Insulin, Campbell and Macleod; Notes for Diabetics, Campbell and Porter; Diseases of the Skin, Sequeira, Walker; Pulmonary Tuberculosis, Fishberg; Diagnostics and Treatment of Tropical Diseases, Stitt; Food for the Sick, Strouse and Perry; The Art of Medical Treatment, Palfrey; Clinical Manual, Finlayson.

*Reference text-books:* A System of Medicine (11 volumes), Allbutt and Rolleston; Modern Medicine (5 volumes), Osler and McCrae; Monographic Medicine (6 volumes), Barker; Oxford Loose Leaf Medicine (6 volumes), Christian and MacKenzie; Nelson's Loose Leaf Medicine (7 volumes); Internal Medicine (3 volumes), Wilson; Diseases of the heart, Mackenzie; Diseases of the Heart and Aorta, Hirschfelder; Diseases of the Arteries and Angina Pectoris (2 volumes), Allbutt; Clinical Medicine, Barker; The Form and Functions of the Central Nervous System, Tilney and Riley; Diseases of the Nervous System, Jelliffe and White; Diseases of the Skin, Morris, Macleod, Pussey, Stelwagon and Gaskill, Hartzell, Schamberg; Modern Clinical Syphilology, Stokes; Studies in Deficiency Disease, McCarrison; Endocrinology and Metabolism (5 volumes), Barker; Diseases of the Digestive System (2 volumes), Bassler; Diseases of Middle Life, Craig; Surgery of Pulmonary Tuberculosis, Alexander.

PAEDIATRICS

*Associate Professor of Medicine, in Charge of Paediatrics:* ALAN BROWN.

*Associate in Paediatrics:* A. W. CANFIELD.

*Senior Demonstrators in Paediatrics:* A. P. HART, E. A. MORGAN, G. R. PIRIE, G. E. SMITH.

*Junior Demonstrators in Paediatrics:* GLADYS BOYD, ROY SIMPSON, F. F. TISDALL.

*Chemist to the Sub-Department of Paediatrics:* ANGELIA M. COURTNEY.

*Assistant Chemist:* IDA F. MACLACHLAN.

*Secretarial Assistant:* MISS HELEN HAYES.

FIFTH YEAR

Students of the Fifth Year devote most of their time to learning the essential principles of Paediatrics, and the difference in the manifestation of disease between adult and child. A series of thirty-two theatre clinics is given, illustrated by plates, lantern slides, morbid specimens and by

the presentation of patients when the nature of the subject under discussion makes it desirable. Among the subjects included in these theatre clinics are: (1) the physiology and pathology of digestion in infants; (2) percentage and caloric method of feeding; (3) classification of digestive disturbances; (4) deficiency diseases of childhood; (5) congenital and acquired cardiac disease; (6) tuberculosis; (7) syphilis; (8) nephritis; (9) acute conditions arising in the newborn infant; (10) child welfare.

#### SIXTH YEAR

Students of the Sixth Year devote their whole time to clinics—bed-side and Out Patient. In addition to this each student is required to spend seven hours in one of the child welfare clinics conducted by the Department of Child Hygiene. In these clinics he is given an idea of the normal feeding and growth of infants and children. During the Sixth Year Course three hours' practical work is required of each student in the milk modifying laboratory of the Hospital for Sick Children, where he is taught the home modification of milk formulae.

*Fellowships:*—The Sub-Department of Paediatrics is prepared to offer to graduate students two full-time Fellowships in Paediatrics. These Fellowships include a certain amount of clinical work as well as laboratory investigation, thus serving to keep the research worker in touch with clinical problems and further his interest in Clinical Paediatrics.

*Text-books:*—(1) Diseases of Infancy and Childhood, Holt; (2) Infant Feeding, Grulee; (3) Simplified Infant Feeding, Dennet; (4) The Normal Child—its Care and Feeding, Alan Brown; Common Procedures in the Practice of Paediatrics, Brown and Tisdall.

*Reference Text-books:*—(1) Diseases of Children, Garrod, Batten and Thursfield; (2) Common Disorders and Diseases of Childhood, Still; (3) Management of the Sick Infant, Porter and Carter; (4) System of Paediatrics (5 volumes, Abt); (5) Diseases of Nutrition and Infant Feeding, Morse and Talbot; (6) Practical Infant Feeding, Hill; Manual for Diabetics, Boyd and Stalsmith.

## THERAPEUTICS

*Professor of Therapeutics:* R. D. RUDOLF.

*Lecturer in Anaesthesia:* S. JOHNSTON.

*Senior Demonstrators in Therapeutics:* C. E. C. COLE, W. V. WATSON.

*Junior Demonstrators in Anaesthesia:* W. H. CARVETH, C. H. ROBSON,  
J. J. HURLEY, H. J. SHIELDS, W. R. PARKS, EASSON BROWN.

Therapeutics is taught in the two final years, and is made as practical as possible.

## FIFTH YEAR

*Lectures.*—In the Fifth Year a course of lectures is given in which the general principles of the subject are considered in a systematic way, emphasis being laid upon the fact that Therapeutics includes far more than the employment of drugs. The whole matter is considered more from the standpoint of disease than from that of drugs and other remedies. Diet, specific therapy, hydrotherapy, the various forms of physio-therapy, and climate are also dealt with. Once a week one-third of the class are given a practical demonstration at the hospital of methods of therapy, patients being freely used to illustrate the points.

## SIXTH YEAR

*Clinical Work.*—In the final year the students are taken in groups at the General Hospital and the different methods of dealing with diseased conditions are demonstrated and discussed, generally upon actual patients. Here also prescription writing is practised. These meetings are quite informal and are conducted five times a week in the medical theatre at the hospital and in the wards, the Socratic method being largely used.

Besides having lectures in the Fifth Year and demonstrations in the Final Year on Anaesthesia, each student is required to give six anaesthetics before graduating.

*Text-books:*—Hare's Practical Therapeutics; Rudolf's Medical Treatment; Dudley W. Buxton, Anaesthetics; J. W. Gwathmey, Anaesthesia; J. Blumfield, A Practical Handbook of Anaesthesia; H. Bellamy Gardner, Manual of Surgical Anaesthesia.

*Reference Text-books:*—Hutchinson & Collier's Index of Treatment, Friedenwald and Rührh, Diet in Health and Disease; Wood, Therapeutics, its principles and practice; Potter, Ortnor's Treatment of Internal Diseases; Cushny, Pharmacology and Therapeutics; Hare, System of Therapeutics; Forchheimer's Therapeutics of Internal Diseases; Osborne's Principles of Therapeutics; Rendle Short's Prognosis and End-results of Treatment; Sajous, Analytic Cyclopaedia of Practical Medicine; Oxford Index of Therapeutics (Sorapure); Stevens' Therapeutics; Martinet, Clinical Therapeutics.

## SURGERY AND CLINICAL SURGERY

*Professor of Surgery:* CLARENCE L. STARR.

*Professors of Clinical Surgery:* A. PRIMROSE, H. A. BRUCE, F. N. G. STARR.

*Associate Professor of Clinical Surgery:*

*Assistant Professors of Clinical Surgery:* W. E. GALLIE, WARNER W. JONES, H. A. BEATTY.

*Associates in Surgery and Clinical Surgery:* C. B. SHUTTEWORTH, E. S. RYERSON, WALLACE SCOTT, N. S. SHENSTONE, G. E. WILSON, D. E. ROBERTSON, H. E. CLUTTERBUCK, M. H. V. CAMERON.

*Demonstrators in Clinical Surgery:* A. B. WRIGHT, R. E. GABY, OLIVER MAHEE, ROBIN PEARSE, R. R. GRAHAM, C. B. PARKER, R. I. HARRIS, T. A. J. DUFF, T. A. ROBINSON.

*Junior Demonstrators:* C. H. HAIR, G. C. MCINTYRE, R. H. THOMAS, A. B. LEMESURIER, W. A. COSTAIN, J. H. WOOD, R. A. McCOMB, J. C. McCLELLAND, E. E. SHOULDICE, H. W. WOOKEY, R. M. JAMES, J. W. ROSS, J. L. McDONALD, K. G. McKENZIE, G. S. FOULDS, J. A. MACFARLANE.

*Fellow in Surgery:* W. GRAHAM.

*Secretarial Assistant:* MISS H. W. MORSON.

## FOURTH YEAR SURGERY

1. *Lectures.*—A course consisting of an introduction to the general principles of surgery.

2. *Clinical Work.*

(a) Clinical study in the Out-patient Department or the Ward. Each clinical class will be taught the surgical conditions following, with History Taking, Surgical Landmarks, and the methods of making physical examinations as applied to them: Inflammation; Suppuration and Abscesses; Surgical conditions of the skin and subcutaneous tissues; Bursitis; Tenosynovitis; Surgical affections of the Lymph Glands; Wounds; Haemorrhage and Thrombosis; Sepsis, infection and infectious diseases; Ulceration; Gangrene; the general features of Fractures, Dislocations and Sprains; Hernia; Bandaging.

These conditions shall constitute the subjects of examination.

(b) A course of surgically applied clinical anatomy. Part of this course will consist of a series of clinical lectures in the theatre of the Toronto General Hospital. Regional anatomy will be studied and illustrated by patients suffering from surgical conditions in different parts of the body. The anatomy of the different regions will be demonstrated by diagrams upon the blackboard, by frozen sections, and by the use of the lantern. There will be also a series of demonstrations of the anatomy of surgical conditions, including fractures, sprains, dislocations, injuries and infections of the soft structures, etc., carried on with small groups in the Anatomical Building in a unit set apart for the Surgical Department.

(c) A series of demonstrations in surgical pathology. These demonstrations will be conducted conjointly by the clinicians and the pathologist and will consist of elementary demonstrations of the gross pathology, the histology, the bacteriology and the analyses of the blood, urine, etc., including not only microscopic findings, but the pathological chemistry necessary for complete clinical investigation. Individual types will thus be presented for the purpose of illustrating the steps necessary in the clinical study of surgical cases as indicated in the gross pathology together with the microscopic and chemical findings.

(d) Demonstrations to small groups of students will be conducted in minor surgery and bandaging. In this series instruction will be given in names and uses of various instruments and equipment used in surgery. Material and methods of preparation and use of various dressings, bandages, and splints will be demonstrated.

#### FIFTH YEAR SURGERY

1. *Lectures.*—Thirty lectures are given throughout the session on some of the general principles of surgery. In addition, short courses are given in the special surgery of certain regions of the body, *e.g.*, the abdomen; the head and neck; the extremities, etc., the courses varying from year to year.

2. *Clinical Work.*—(a) Clinical work in the wards will be conducted according to the time-table provided. During the year the student is taught to make a complete examination of surgical cases in order that he may be able to arrive at a diagnosis and to learn the appropriate scientific treatment. The following conditions will be studied and will be, as far as possible, the subjects of the clinics: (1) Injuries and diseases of the bones and joints; (2) the surgery of the neck, acute and chronic inflammation primary and secondary new growths, diseases of the thyroid gland; (3) surgery of the thorax, empyema, tumours of the breast; (4) surgery of the abdomen, appendicitis, cholecystitis, ulcer of the stomach and duodenum, cancer of the stomach, general peritonitis, tuberculous peritonitis, gall stones, acute and chronic intestinal obstruction, abdominal injuries, haemorrhoids, fistula in ano, anal fissure; (5) the surgery of the kidney, stone, pyonephrosis, surgical conditions of the bladder and use of the cystoscope; (6) the surgery of the scrotum and testes, acute and chronic inflammation, tumours, hydrocele, varicocele; (7) the surgery of mouth, ulcers, tumours of the lip, tongue and gum, tumours of the upper and lower jaw; (8) diseases and injuries of blood and lymph-vascular systems; (9) surgery of the extremities including fractures, amputations, dislocations, injuries to joints, and injuries to nerves; (10) injuries and diseases of the head and spine.

A special course in orthopaedic surgery will be given in the Hospital for Sick Children.

(b) Each student will be required to take three complete surgical histories during the year. This work will be directed by the resident or senior house-surgeon. One history is to be left at the secretary's office at the end of each trimester. Each such history is to be annotated and initialed by the clinician, and after revision by the student to be examined by the Professor of Surgery.

(c) A course of surgically applied clinical anatomy.

This course will be conducted in the clinical theatre of the Toronto General Hospital. Regional anatomy will be studied on and illustrated by patients suffering from surgical conditions in different parts of the body. The anatomy of the different regions will be demonstrated by diagrams upon the blackboard, by frozen sections and by the use of the lantern.

(d) A series of demonstrations in surgical pathology.

These demonstrations will be conducted conjointly by the clinicians and the representatives of the Department of Pathology and will consist of demonstrations of the gross pathology, the histology, the bacteriology and the analyses of the blood, urine, etc., including not only microscopic findings, but the pathological chemistry necessary for complete clinical investigation. The demonstrations will illustrate the steps necessary in clinical study, and the appropriate treatment, based upon the gross pathology, together with the microscopic and chemical findings.

#### SIXTH YEAR SURGERY

The work of the Sixth Year in Surgery is entirely clinical, including one weekly mid-day clinical lecture.

##### *Clinical Work.*

(a) Two clinics will be given in each week to the students of this year. The clinical classes in each Hospital will consist of the students assigned to the surgical services in the various Hospitals.

(b) The students in this year are assigned at the Secretary's Office to the surgical services at the Toronto General, St. Michael's, Western and Hospital for Sick Children, the number of men to each service depending on the number of students in the class. These men will be required to act as clinical clerks and to perform the following duties, the students alternating as arranged in the various divisions:

1. To act as assistants to the House Surgeon and to be prepared to carry out his instructions at all times.
2. To take the history of each patient allotted to him within twenty-four hours of his admission to the wards. To record the physical examination and to do and record the necessary laboratory work.
3. To attend all the operations performed on his service, and to be prepared to act as second assistant.
4. To do whatever dressings are detailed to him by the House Surgeon.



5. In the event of an autopsy on any patient who has been under his charge, to assist and make the necessary records.

6. To work in the Out-patient Department and Emergency Department.

7. To be required to attend the clinics given to the Fourth and Fifth Years on his service, and to be prepared to give to the clinician a detailed account of the cases being presented, and, if necessary, to act as demonstrator under the direction of the clinician. Further, to be required to provide and prepare the material for each clinic to the Fourth and Fifth Years.

8. During his term of service he shall be prepared when directed to do so, to assist in giving and to give anaesthetics to the patients on his service, under the supervision of the anaesthetist.

(c) Once a week a conference will be held in the Pathological Department, when the Professor of Pathology and the members of the clinical teaching staff will meet to discuss the pathological material which has been sent from the clinic to the Pathological Department during the preceding week. These conferences between the Pathologist and the clinician will form a very important part of the tuition of the student in Surgery in the Sixth Year.

Students in the Sixth Year will receive special instruction in physiotherapy. The value of massage, gymnastics, electricity, hydropathy, etc., in the treatment of surgical cases will be demonstrated.

*Text-books:*—Principles of Surgery, Rose and Carless, Haubold, Gask and Wilson, Da Costa; Surgical Diagnosis, Gould, DeQuervain (translation); Process of Diagnosis, Ryerson; A Synopsis of Surgery, Ernest W. Hey Groves; Abdominal Operations, Moynihan; Fractures and Dislocations, Wilson and Cochrane; Minor Surgery, Foote; Surgical Materials and Their Uses, MacLennan.

*Reference Text-books:*—Principles of Surgery, Choyce, Thomson and Miles, Oxford Loose Leaf Surgery; Surgical Treatment, Cheyne and Burghard, Binnie, Kocher; Operative Surgery, Horsley, Carson; After-treatment of Surgical Patients, Bartlett; Minor Surgery, Vaughan and Burnham, Williams; Surgical Handicraft, Pye, White; Orthopaedic Surgery, Lovett and Jones, Jones, Whitman; Fractures and Dislocations, Scudder, Cotton; Surgery of the Brain, Rawling; On the Spleen, Moynihan; Urology, Irwin.

## OBSTETRICS AND GYNAECOLOGY

*Professor of Obstetrics and Gynaecology:* W. B. HENDRY.

*Associate Professor of Obstetrics:* K. C. McILWRAITH.

*Associate Professor of Gynaecology:* F. W. MARLOW.

*Assistant Professors of Obstetrics and Gynaecology:* F. A. CLELAND, R. W. WESLEY, N. D. FRAWLEY.

*Associates in Obstetrics and Gynaecology:* W. A. SCOTT, J. G. GALLIE.

*Associate in Obstetrics:* J. A. KINNEAR.

*Senior Demonstrator in Obstetrics and Gynaecology:* W. W. LAILEY.

*Junior Demonstrators in Obstetrics and Gynaecology:* W. G. COSBIE,

H. B. VANWYCK, D. M. LOW, S. J. N. MAGWOOD, W. A. DAFOE,

F. J. O'LEARY, W. T. NOONAN.

*Secretarial Assistant:* MISS M. F. CARSON

## FIFTH YEAR

*Lectures:*—Obstetrics:—A course of lectures illustrated by diagrams, lantern slides and models will be given. Stated generally, the course consists of two parts. The first part deals with the anatomy and physiology of the female organs of reproduction; the anatomy, physiology and management of normal pregnancy, labour and the puerperium, and the care of the infant. The second part is concerned with abnormal conditions arising during pregnancy, labour, and the puerperium, and with maladies of the infant.

Practical demonstrations on anatomy, the mechanism of labour, the use of obstetrical instruments, etc., will be given to small sections of students.

*Gynaecology:*—A course of lectures illustrated by pathological specimens, diagrams and lantern slides will be given. The lesions of each organ are considered in detail and the methods of gynaecological diagnosis and treatment indicated.

*Clinical Work:*—Obstetrics:—The student attends clinics at the Toronto General Hospital. At these clinics practical instruction is given in the examination of patients, the diagnosis of pregnancy, the management of labour and the puerperium and the care of the infant.

*Gynaecology:*—Clinical instruction is given at the Toronto General Hospital, in the method of case taking, the examination of patients, the use of instruments, and in the conduct of operations.

*Pathological Demonstrations:*—The naked eye and microscopic pathology of the common obstetrical and gynaecological lesions will be demonstrated in the museum.

## SIXTH YEAR

*Obstetrics.*—The student attends the Obstetrical Hospital for a period of five weeks during which time he is given an opportunity to see all the work of the hospital, and to assist in the management and treatment of cases. He may be required to attend patients in their own homes and to perform other duties in connection with the Out-Patient Service. Clinical lectures are given once a week on interesting and abnormal cases.

*Gynaecology.*—Clinical instruction in the examination and diagnosis of gynaecological cases is given to small sections of students. Each student is required to act as clinical clerk to the cases assigned him, to be present at any operations required, and to follow the after-treatment. Operations will be performed on stated days and at these the members of the clinic may be present.

*Pathological Demonstrations.*—A series of demonstrations in continuity with those held during the fifth year will be given in the museum.

*Text-books:—*

*Obstetrics.*—Eden; Whitridge Williams; De Lee.

*Gynaecology.*—Barbour & Watson; Graves; Eden & Lockyer.

*Obstetrics and Gynaecology.*—Munro Kerr; Fairbairn.

*Reference Text-books:—*

*Obstetrics.*—Polak; Munro Kerr, Operative Obstetrics; Davis, Operative Obstetrics; Lea, Puerperal Infection; Ballantyne, Antenatal Pathology.

*Gynaecology.*—Kelly, Operative Gynaecology; Berkeley & Bonney, Gynaecological Surgery; Winter & Ruge, Gynaecological Pathology, translated by Clark; Cullen, Cancer of the Uterus, Crossen, Bland.

## OPHTHALMOLOGY

*Professor:* J. M. MACCALLUM.

*Assistant Professors:* D. N. MACLENNAN, W. H. LOWRY.

*Senior Demonstrators:* M. LYON, W. W. WRIGHT, F. A. AYLESWORTH,  
C. E. HILL.

*Assistant:* A. E. MACDONALD.

*Secretarial Assistant:* MISS M. KINGSMILL

## FIFTH YEAR

Instruction will be given by quizzes, recitations or lectures. The class will be divided into small sections. In each section the applied anatomy of the eye, orbit and surrounding structures will be considered, followed by instruction in the use of the ophthalmoscope, retinoscope and other instruments of diagnosis. The methods of external examination of the eye, the use of the test type, test lenses and the principles of refraction will be thoroughly dealt with.

## SIXTH YEAR

Instruction will be wholly clinical and practical, and will include Ophthalmoscopy and its relations to general medicine, advanced refraction. Each student will be required to determine the refraction of patients in the Out-Patient Clinic and must, for this purpose, supply himself with an ophthalmoscope and a retinoscope. When possible the students will be shown the more usual operations on the eye.

There will be a short course of didactic lectures.

*Ophthalmology:—*

*Text-books:—*J. Edward Jackson; May; Mayou; Nettleship; Parker; Parsons; Swanzy; Veasey; Hepbourne; Sym; Marshall.

*Reference Text-books:—*de Schweinitz; Weeks; Fuchs; Posey & Wright; Theobald; Ball.

## OTO-LARYNGOLOGY

*Professor:* PERRY G. GOLDSMITH.

*Associate Professor:* GILBERT ROYCE.

*Associates:* GEO. M. BIGGS, EDMUND BOYD.

*Senior Demonstrators:* J. C. CALHOUN, A. A. CAMPBELL.

*Junior Demonstrators:* D. E. STAUNTON WISHART, H. H. BURNHAM,  
H. W. D. MCCART, C. A. RAE.

*Secretarial Assistant:* MISS O. V. ROSS

The course of instruction in oto-laryngology is carried on in the Toronto General Hospital, where the facilities placed at the disposal of the students are unusually complete. There is an in-door service of twenty beds, and in the outdoor, in addition to the large clinic, where the final year students

receive instruction, there is a room set aside for the fifth year classes, with eight cubicles for examination purposes.

This course is carried on during both the fifth and sixth years of the curriculum.

Clinics for the final year students are given one day a week at the Hospital for Sick Children. There is an in-door service which varies from ten to fifteen beds.

#### FIFTH YEAR

In the fifth year the students will receive instruction in:

- (1) The normal anatomy of the ear, nose and throat.
- (2) The methods of using the head mirror and the various instruments required in examining the ear, nose and throat.
- (3) The ordinary tests for hearing.
- (4) The recognition of the ear, nose and throat, in their normal conditions, as exemplified by clinical material.

At the close of the session a clinical examination will be held.

#### SIXTH YEAR

In the sixth year the students will be divided into small groups for the purpose of studying the commoner conditions met with in general practice, and as much clinical material as possible will be utilized for the purposes of personal observation.

A series of lectures will be delivered upon the various diseases of the ear, nose and throat, ordinarily met with by the general practitioner.

In the final, sixth year, two clinical examinations will be held. One at the completion of the trimester and the other at the end of the session.

*Text-books:*—Ear, Nose and Throat, Dan MacKenzie; Diseases of Nose Throat and Ear, A. Logan Turner.

*Reference Text-books:*—Diseases of Nose and Throat, Sir St. Clair Thomson; The Nose and Throat and their Treatment, Parker & Colledge; Diseases of Nose and Throat, Herbert Tilley; Diseases of the Ear, Albert Gray.

#### PSYCHIATRY.

*Professor of Psychiatry:* C. R. FARRAR.

*Professor in Psychology:* E. A. BOTT.

*Assistant Professor in Psychology:* W. E. BLATZ.

*Demonstrators:* F. S. VROOMAN, D. R. FLETCHER, G. A. McLARTY, C. M. CRAWFORD, E. P. LEWIS.

Instruction in Psychiatry in conjunction with psychology, and including option courses, extends from the second to the sixth year.

*Third Year.*—An introductory course in general psychology is given, as part of the course in physiology. In this course selected topics are discussed, with particular reference to mental development, and the application of psychology in psychiatry and mental hygiene.

*Fourth and Fifth Years.*—A series of lectures dealing with the development of present-day concepts in psychopathology, emphasizing particularly individual developmental factors and constitutional reaction types.

*Fifth and Sixth Years.*—Clinical lectures and demonstrations covering the commoner forms of mental disease, including neurosyphilis. The application of psychiatry in general medicine and surgical practice, with illustrative cases of psychic components of somatic disease, and somatic factors in the psychoses. Medico-legal problems.

Students will be required to examine and report upon cases and will have opportunity to follow the clinical course of typical diseases

*Option Courses*

For special students a more intensive course is provided, beginning in the second year.

A course of lectures in the second year, covering in some detail the field of general psychology, is followed in the third year by a laboratory course in psychological methods, in which the student is familiarized with laboratory technique and is required to conduct and record a series of fundamental experiments.

In the fourth year is offered a lecture course in abnormal psychology, designed especially to indicate the application of psychological data and procedure in medicine and psychiatry. The discussions refer particularly to the subjects of Deficiency, Delinquency and Dependency.

In the fifth year students will be offered opportunity to do further clinical, laboratory and field-work in psychiatry and mental hygiene.

Individual psychiatric problems will be investigated in the special classes of the public schools, in the juvenile court, in various types of public institution, and in the community with reference to poverty, vice, crime and public health.

*Text-books:*—*Outlines of Psychiatry*, White; *Text-book of Psychiatry*, Bleuler; *Practical Clinical Psychiatry*, Strecker and Ebaugh; *Mental Disorders*, Barnes; *Manual of Psychiatry*, Rosanoff; *Nervous and Mental Disorders from Birth through Adolescence*, Sachs and Hausman; *Readings in Abnormal Psychology and Mental Hygiene*, Taylor; *Psychological Medicine*, Craig and Beaton; *Manic depressive Insanity*, Kraepelin; *Dementia Praecox and Paraphrenia*, Kraepelin; *Psychiatric-Neurological Examination Methods*, Wimmer Hoisholt.

## PATHOLOGY AND BACTERIOLOGY

*Professor of Pathology and Bacteriology and Curator of the Museum and Laboratories:* OSKAR KLOIZ.

*Associate Professor of Bacteriology:* W. L. HOLMAN.

*Assistant Professor of Pathology and Assistant Curator of the Museum:*  
W. L. ROBINSON.

*Associate in Serology:* H. K. DETWEILER.

*Lecturers in Pathology:* W. MAGNER, J. E. BATES.

*Lecturer in Bacteriology:* G. C. CAMERON.

*Assistant in Pathological Museum:* G. S. CHARLESWORTH

*Demonstrators in Pathology:* G. F. LAUGHLIN, G. R. PHILP, A. MACKAY,  
C. B. KELLY.

*Demonstrators in Bacteriology:* MISS R. PRICE, C. W. HARRIS.

*Fellows in Pathology:* W. L. DEETON, D. A. IRWIN.

*Fellow in Bacteriology:* T. B. VERNER.

*Secretarial Assistant:* MISS G. BOYD.

*Research Assistant:* MISS W. SIMPSON.

The course of instruction in Bacteriology is given during the second half of the Third year. This course is adapted to the needs of the student of Medicine, and attempts to give practical instruction concerning the important infections which are met with in general practice. The bacteria are studied not only from the standpoint of their biological characters, but also in relation to the processes which are induced by them in human tissues.

In the Fourth Year this course is followed by instruction in Pathology, the first half of the year being devoted to a study of the Principles of Pathology, while during the second half of this year the time is devoted to Special Pathology. It is attempted to make the course as comprehensive as possible using every means to allow the student to understand the Pathological lesions of tissues and the consequences. During the course in practical Pathological Histology the specimens from the Museum, illustrating the subject for study, are brought before the student with special demonstrations.

During the Fifth Year the student will spend all available time at autopsies, and he is obliged to give attendance at a minimum of twelve cases.

During the Sixth Year weekly conferences are held in conjunction with other departments in which the Pathological changes observed in certain of the more common diseases are discussed with the student and illustrative Pathological case histories are analyzed to bring out the reasons, based on Pathological grounds, of certain Clinical manifestations.

## THIRD YEAR

During the second semester the student receives a course of lectures and practical laboratory exercises in Bacteriology. The lectures serve as a general guide to indicate the importance of certain bacteria and their actions in the tissues. The laboratory exercises are devised to permit the student to obtain a proper knowledge of the Pathogenic micro-organisms, and the means of isolation and identification of the most important bacteria. The practical course is introduced by a limited instruction on media-making and the technique of staining of bacteria and sterilization. Subsequently the student does not prepare his own media, but all of the time-consuming technical processes are attended to by the laboratory staff. During the last few weeks in this course the student is given instruction on the principles of immunity, and upon the most important laboratory methods in Serology which are used for the diagnosis of disease. During the entire course, demonstrations are offered upon the intricate problems in Bacteriology for which time is not available to the student for personal investigation.

## FOURTH YEAR

The course in General Pathology occupies the first half of the Fourth Year, and consists of a series of lectures and a course of practical exercises. The lectures cover the subjects of General Principles, Anomalies, Degenerations, Necrosis, Pigmentations, Inflammation and Tumors. In the practical exercises the attempt is made to illustrate all points discussed during the lectures, by microscopic preparations and by examples of similar lesions obtained from our Museum. In all instances the macroscopic is taught with the microscopic study of the lesion. Great emphasis is laid upon the importance of an understanding of the inflammatory reaction, and the methods of healing which follow it. The Department possesses a series of microscopic preparations for the presentation of the practical work in General and Special Pathology. By means of these materials which have been prepared by the Assistants of the Department, the student is able to spend the allotted time in the study of the disease processes in the tissue, and he does not lose the time and effort in an attempt to carry out a technical procedure. The Department now possesses six hundred and fifty sets of these preparations.

During the second half of the Fourth Year, the student continues his studies in the Department of Pathology, receiving his instruction by lectures and practical exercises in Special Pathology. During this course, the principles of Pathology which were studied in the preceding semester are applied to the individual organs of the body. In this manner the student becomes acquainted with the important lesions which make their appearance in the various tissues. These courses in Pathology are consistently illustrated by specimens from the Museum, coloured illustra-



tions and by reference to texts and monographs. The student is encouraged to spend some time in accessory reading for which the library in this Department is available. Students desiring to acquire additional technique in preparing stained sections are encouraged to do so in their spare time.

#### FIFTH YEAR

During the Fifth Year the student will attend as many autopsies as his time will permit, at the Toronto General Hospital, St. Michael's Hospital and the Hospital for Sick Children. Special attention is being given to instruction in the autopsy room, wherein the case is not only demonstrated during its dissection, but is analyzed with the Clinical report which must accompany every case. A full discussion is entered into with the students and they are encouraged to analyze and criticize any of the problems under discussion. The student must be certified for at least twelve autopsies, as well as present a report upon three of the interesting cases which he has observed.

#### SIXTH YEAR

During the Sixth Year one conference a week will be held upon the principal diseases which interest the General Practitioner. These conferences will be of the nature of case analyses wherein the Pathological processes of the disease will be offered in explanation of the Clinical manifestations. The conferences will be carried on in conjunction with the members of the Clinical Departments as well as with members of the other laboratory Departments.

At the conclusion of the sixth year, each student must present a thesis upon some case or pathological process which he has observed during his ward work and which he has subsequently further studied in the Laboratory or at Autopsy. These theses must be completed by April 1st.

#### ADVANCED WORK AND SPECIAL RESEARCH

Opportunity is afforded to those suitably trained to pursue advanced work and special research in experimental and practical Pathology and Bacteriology. For these purposes the laboratories are equipped with the necessary apparatus and material.

##### *Text-books:*

*Bacteriology and Immunology:* Park and Williams; Hiss, Zinsser and Russell; Karsner and Ecker, Zinsser.

*Pathology:* Karsner, Delafield and Prudden; Adami and McCrae; MacCallum; Mallory; Pembrey and Richie.

## PATHOLOGICAL CHEMISTRY

*Professor:* V. J. HARDING.

*Assistant Professor:* G. HUNTER.

*Demonstrator:* D. H. BODDINGTON.

*Assistants:* R. W. URQUHART, R. C. MONTGOMERY.

*Fellows:* M. S. RIOCH, L. N. SILVERTHORNE.

*Secretarial Assistant:* MISS M. DUNCAN.

## FOURTH YEAR

A systematic laboratory course in routine chemical examination of urine, blood, and gastric contents, supplemented by lectures and demonstrations.

## FIFTH YEAR

*Lectures:*—A course of lectures extending throughout the year is given on the metabolic aspect of various pathological conditions.

*Clinical Laboratory:*—Apparatus and reagents are supplied to students in this year by the Department of Pathological Chemistry for the conduct of all chemical examinations necessary to the proper study of the cases under their charge. At least ten complete urine examinations shall be carried out, and the records filed both in the Department of Pathological Chemistry and the Departments of Medicine or Surgery. For the guidance of the student in such work, an instructor is in regular attendance at hours specified on the time-table.

In addition each student will carry out a series of blood examinations under direction.

*Option Course:*—A laboratory course in more advanced methods of chemical examination of urine and blood. This course is particularly designed to meet the needs of those who may wish to pursue investigation work in various branches of internal medicine. The class is limited to twelve, and it is desirable that students taking this course shall have taken previous option work in biochemistry or physiology.

## SIXTH YEAR

*Clinical Laboratory:*—Space is provided each student as in the previous year for the conduct of all chemical examinations necessary for a study of the cases under his charge.

At the end of each year, each student shall make good any loss or damage to apparatus under his care. Otherwise he shall not be permitted to sit for the University examinations.

*Text-books:*—Wells, Chemical Pathology; Myers, Practical Chemical Analysis of Blood.

*Reference Text-books:*—Lusk, Science of Nutrition; Underhill, Manual of Selected Biochemical Methods; Cummer, Manual of Clinical Laboratory Methods.

# HYGIENE AND PREVENTIVE MEDICINE

*Professor:* J. G. FITZGERALD.

*Associate Professor:* R. D. DEFRIES.

*Assistant Professors:* D. T. FRASER, P. J. MOLONEY.

*Assistant Professor of Physiological Hygiene:* C. H. BEST.

*Demonstrator in Industrial Hygiene:* J. G. CUNNINGHAM.

*Demonstrator in Hygiene:* MRS. M. M. JOHNSTON.

*Assistant Demonstrator in Hygiene:* D. C. B. DUFF.

*Secretarial Assistant:* MISS O. E. SOMERVILLE.

The Department of Hygiene and Preventive Medicine provides a course of lectures and demonstrations in Preventive Medicine, Hygiene and Sanitation, for students in the fifth year in the Faculty of Medicine.

Students in the Faculty of Medicine are required between the end of the Fifth and the beginning of the Sixth Year (either in June or September) to take a practical course of one month's duration in Preventive Medicine and Public Health.

The final standing of the student in this subject will be determined on the basis of

- (a) Examination paper at the end of the Fifth Year, and
- (b) Term mark obtained in the practical course.

Lecture courses are provided also in Hygiene and Sanitation for students in the Faculties of Applied Science, Household Science and the Department of Social Service.

Laboratory and didactic courses of instruction are given to students in the Faculty of Applied Science who have elected the Municipal Option in Civil Engineering and to students in the Department of Public Health Nursing.

A course of instruction for graduates in Medicine leading to the Diploma in Public Health was instituted in 1904. Details of the curriculum leading to the Diploma in Public Health will be found on page 430.

A course of instruction in Industrial Hygiene for graduates in Medicine is available for those who wish to undertake work in this branch of Preventive Medicine.

Facilities for Research in Preventive Medicine, Hygiene and Public Health (Immunity, Serology and Bacteriology) are provided in the Research Division of the Connaught Laboratories, for suitably qualified candidates desirous of prosecuting such studies.

*Text-books:*—FitzGerald, Practice of Preventive Medicine, 2nd ed.; Rosenau, Preventive Medicine and Hygiene; Park, Public Health and Hygiene; Overton and Denno, the Health Officer; Prescott & Winslow, Elements of Water Bacteriology; American Public Health Association Standard Methods of Water Analysis.

*Reference Text-books:*—Kolmer, Infection, Immunity and Specific Therapy; Ledingham & Arkwright, The Carrier Problem of Infectious Diseases; Whipple, Microscopy of Drinking Water; Chandler, Animal Parasites and Human Disease; Mock, Industrial Medicine and Surgery; Zinsser, Infection and Resistance (3rd edition).

## MEDICAL JURISPRUDENCE

*Professor:*

### FIFTH YEAR

*Lectures.*—About eighteen lectures and class-room demonstrations will be given. These will be illustrated as required by lantern slides and by specimens from the Pathological Museum or from private collections.

The lecture course will embrace *inter alia* a discussion of:—Legal Criminal procedures and the relation of Medical men thereto. Medical evidence, documentary and oral, ordinary and expert. Personal identity of the living and of the dead. Thanatology: The reality of death; *post mortem* changes, autopsies and reports. Causes producing deaths by violence such as the various forms of asphyxia, heat, cold, electricity, etc. Wounds in their medico-legal relations. Blood stains and the examination of blood. Medico-legal aspects of the sexual functions, impotency, sterility and legitimacy. Pregnancy, abortion and infanticide. Rape and allied offences against chastity. Civil and criminal malpractice.

*Text-books:*—Glaister, Reese, Emerson, Draper; Buchanan's Text-book of Forensic Medicine and Toxicology.

*Reference Text-books:*—Taylor's Principles; Whitthaus and Becker; Peterson and Haines; Dixon Mann; Cattell's *Post Mortem Pathology*; Greene's Life Insurance; Atkinson's Law in Medical Practice; Brother's Medical Jurisprudence; Wadsworth's Post Mortem Examinations.

## RADIOLOGY

*Associate:* G. E. RICHARDS.

*Assistant Demonstrators:* W. H. DICKSON, A. H. ROLPH.

### FIFTH YEAR

A series of ten lectures will be given dealing with the principles underlying the use of X-rays and radium as therapeutic agents, and the practical application of these in the treatment of disease.

### SIXTH YEAR

Twenty lectures and demonstrations are given. In this course the use of X-ray methods in the diagnosis of diseases of the Gastro-intestinal tract, the chest, and the skeletal system will be fully covered, and will be illustrated by plates and lantern slides. It is also proposed to make demonstrations to small groups in the use of the fluoroscope.

*Text-books:*—Grover, Electro-Therapeutics; Clark, Radium, X-Ray and Electro-Therapy; Knox, System of Radiography and Radiotherapy, 2 vols.; Carman, Roentgen Diagnosis of Diseases of Gastro-Intestinal Tract; Simpson, Radium; Baetjer & Wetters, Diseases of Bones and Joints; George & Leonard, The Pathological Gall Bladder; Ruggles & Holmes, X-ray Interpretation; The U.S. Army Manual of Radiology.

## HISTORY OF MEDICINE

*Professor:* J. T. FOTHERINGHAM.

### SIXTH YEAR

*Lectures:*—Certain periods in the development of the Healing Art will be sketched, and some of the so-called "Systems" broadly outlined, together with certain national contributions to the growth of Ancient, Mediaeval and Modern Medicine. Biographical studies will be undertaken of some of the great Masters, whose work has at various ages marked Epochs of advance, and particularly of those whose names are associated with the beginnings of scientific knowledge upon which present-day Medicine is founded.

## THE BANTING AND BEST CHAIR OF MEDICAL RESEARCH

*Professor:* F. G. BANTING.

*Research Associates:* C. H. BEST, E. J. KING, MISS SADIE GAINES.

*Research Assistant:* MRS. W. B. BREBNER.

*Research Fellows:* W. B. BREBNER, A. W. M. WHITE.

The Banting and Best Chair of Medical Research was established by the Board of Governors of the University as the result of a special grant of the Legislature of the Province of Ontario in 1923.

The terms of the Act establishing the Banting and Best Research Fund provide for an annual grant to the University of Toronto for the promotion of Medical Research in accordance with the following preamble which appears in the Act:—

"Whereas F. G. Banting, M.D., and C. H. Best, B.A., in the prosecution of medical research have made an important discovery by means of which it is now possible to ameliorate the condition of persons suffering from the disease known as diabetes, and it is believed that prosecuting the research will result in perfecting a remedy for the cure of that disease, and it is desirable and expedient in the public interest to provide by legislative grant the continuation and prosecution of kindred researches."

Research under the provisions of this Chair began in July, 1923, and researches on several medical problems are being carried on in laboratories in the Pathology Building.

## LECTURES IN DENTISTRY

The Faculty have arranged for a course of lectures to be delivered during the Session, on the application of Dentistry to Medicine. The instruction will be given by a man properly qualified for the purpose and will be delivered to the students of the final year. The course will be obligatory.

## SCHOOL OF HYGIENE

In 1925 the School of Hygiene was established in the University of Toronto. The School occupies the building recently completed on College St. The International Health Board of the Rockefeller Foundation gave to the University the sum of \$650,000, of which \$400,000 provided the building and \$250,000 is available for endowment. This endowment has made possible the organization of sections of Biometrics and Epidemiology and Physiological Hygiene in the School of Hygiene.

The Departments of Hygiene and Preventive Medicine and Public Health Nursing occupy quarters in the School of Hygiene, thus bringing together those departments of the University responsible for instruction in Hygiene, Preventive Medicine and Public Health.

In addition space is provided in the new building for the Research Division of the Connaught Laboratories and for the University section of the Antitoxin and Insulin Divisions.

## CONNAUGHT LABORATORIES

*Director:* J. G. FITZGERALD.

*Associate Director:* R. D. DEFRIES.

*Assistant Directors:* D. T. FRASER, P. J. MOLONEY, C. H. BEST,  
D. A. SCOTT.

*Comptroller:* F. LORNE HUTCHISON.

*Research Member:* A. H. W. CAULFIELD.

*Research Associate:* N. MCKINNON.

*Research Assistants:* MISS C. J. FRASER, MRS. M. M. JOHNSTON, MISS  
E. M. TAYLOR, MRS. E. C. ROBERTSON, MISS J. RIDOUT, MISS E.  
WOODSWORTH.

*Clinical Associates:* A. M. JEFFREY, A. L. MCKAY.

*Bacteriologists:* MISS A. BOLTON, MISS C. VIETS.

*Secretary:* MISS H. FINEGAN.

The Connaught Laboratories consist of Research, Antitoxin and Insulin Divisions. These laboratories were established to provide facilities for research in the field of Preventive Medicine, Bacteriology, Serology and Immunity; and the production and distribution of Public Health Biological Products and Insulin. The distribution of diphtheria antitoxin was commenced in May, 1914, and since that date the production of other sera

and vaccines has been undertaken and the distribution extended throughout Canada and Newfoundland, the British West Indies, and to New Zealand. The preparation of Insulin (pancreatic extract) was commenced in January, 1922.

The products distributed include: diphtheria antitoxin, tetanus antitoxin, scarlet fever antitoxin, anti-meningitis serum, small-pox vaccine, anti-pneumococcus serum, diphtheria toxoid, Schick test outfits, scarlet fever toxin, typhoid vaccine and rabies vaccine and insulin.

Since February 1st, 1916, the Provincial Board of Health of Ontario has distributed, free of charge in Ontario, the above products.

Similarly in September, 1917, the Bureau of Public Health, Saskatchewan, began free distribution of diphtheria antitoxin in that Province. (The antitoxin so supplied is prepared by these Laboratories.)

The Department of Militia and Defence was supplied with tetanus antitoxin and other biological products used by the Canadian Expeditionary Force Overseas and in training in Canada.

In October, 1917, a farm of fifty acres (this has been added to and now consists of more than seventy acres) and completely equipped laboratories and stables were presented to the University by Colonel Albert Gooderham. These Laboratories were given to provide facilities for research in Preventive Medicine, and also to provide for the production of sera and vaccines. In connection with these Laboratories there has been established the Connaught Laboratories Research Fund, the interest on which is utilized for the support of research in Preventive Medicine.

## BUILDINGS

The University of Toronto provides the most ample facilities for the practical, didactic and clinical instruction of medical students. The following buildings are utilized by the student in his course in Medicine: Biological, Chemical and Physics Buildings; Medical Building; Pathological Building; Anatomical Building; University Library; Toronto General, St. Michael's and Western Hospitals and Hospital for Sick Children, Isolation Hospital, Toronto Psychiatric Hospital.

### THE MEDICAL BUILDING

The Medical Building is situated between the University Library and the Biological Building.

It is three storeys in height in front, with an additional storey and sub-basement in the wings, which extend eastward. Two large lecture rooms are provided which flank the main building; the larger has accommodation for about three hundred and fifty students; the smaller for about two hundred students.

The three main floors of the building are arranged upon what has been called the unit-system, a unit-room being thirty feet long by twenty-three feet deep, lighted on its long face by large windows. These rooms may be

united so as to form large laboratories or may be cut in two where it is necessary to have smaller rooms. On the ground floor in the main portion are situated in front the Secretary's office, a large faculty room, a lavatory, and a library.

The building is utilized for conducting the work in the Departments of Physiology, Biochemistry, Pharmacology, and Zymology. In it are also the administrative offices of the Faculty of Medicine.

### THE LIBRARY

The University Library is contained in a building of its own, situated on the east side of the campus that lies to the south of University College. All students who have paid a library fee to the Bursar of the University are entitled to the privileges of the Library. Besides Reading Rooms the building contains Departmental Studies, which may be used as study-rooms by honour students in the various branches in which the Professors hold seminary courses, and private studies, intended for members of the Faculty or advanced students engaged in research work. The Library is opened at 8.45 every morning and remains open until 10 in the evening during the academic term. Books in ordinary use may not be taken out of the building during the daytime, but are lent for the night shortly before the hour of 5 p.m., to be returned the following morning before 10 o'clock. Books not in general demand may, on special application, be borrowed for a longer period. Failure to return a borrowed book at the proper time and other breaches of the regulations are punishable by fine or suspension from the privileges of the Library.

### THE PATHOLOGICAL BUILDING

This building is situated on University Avenue and connected by a covered corridor with the Out-patient Department and so with the rest of the Toronto General Hospital. On the basement, or ground floor, are the Pathological Museum, lecture room and autopsy room as well as students' coat room and lavatories. On the first floor are rooms for the routine pathology and class rooms for pathological histology and bacteriology. On the second floor there are laboratories, and rooms for the Departmental Library and special classes in Pathology, in addition to laboratories for bacteriological and serological investigation. On the third floor are the class rooms for systematic instruction in pathological chemistry and the laboratories for the staff in this Department, including balance, polarimeter, combustion and experimental rooms. Above this is the accommodation for animals.

Connected with the autopsy room is a cold storage plant with accommodation for twelve cadavers, and by means of a brine circulation, refrigerators in the staff laboratories on the first, second and third floors are kept cold. For many of the laboratories too there is a compressed air service.



The lecture room has seats for about 150 students and is connected with a room for preparing experimental demonstrations.

The museum is planned especially for the instruction of students: a small catalogue room and a preparation room are connected with it.

The class rooms are divided into small units and are exceptionally well lighted.

Lockers are provided for more than 300 students in the laboratories for pathological chemistry so that every student working in the Hospital may have his own place and apparatus.

The building is of fire-proof construction throughout.

### THE ANATOMICAL BUILDING

The new Anatomical Building is situated to the east of the Medical Building to which it is parallel, and with the south wing of which it is connected.

It consists of four storeys and a basement except at the north end where there is a large lecture-room, two storeys in height and capable of accommodating 250 students. Beneath the lecture room are several well-lighted and commodious rooms which are equipped as a laboratory for experimental surgery. The remainder of the basement gives ample space for the preservation and storage of material and for work shop.

The first floor is devoted to cloak-rooms for those occupying the lecture-room, a chart room and a photographic room, together with two demonstration or study rooms. Accommodation is also reserved for a Department of Anthropology which, it is hoped, may shortly be established.

On the second floor is a commodious Museum occupying the south end of the building, with a preparation room in connection. Two laboratories planned to accommodate classes in Histology, Embryology and Neurology are also provided upon this floor, together with a second lecture room with seating accommodation for approximately 100 students, and two demonstration rooms.

The third floor provides for a departmental library, private rooms for members of the staff, a dissecting room and a room for X-ray demonstrations, while the fourth floor is devoted mainly to a series of dissecting rooms, well lighted by sky-lights. Certain of these rooms may be used as required for special classes and provision is also made for an osteology room and a demonstrators' room. Ample locker and lavatory accommodations are provided.

### ROYAL ONTARIO MUSEUM

ARCHAEOLOGY, GEOLOGY, MINERALOGY, PALAEONTOLOGY, ZOOLOGY.

Students of the University in all departments are recommended to avail themselves of the privileges of the Museum, which, although under separate control, is intimately connected with the work of the University.

The Museum is open on all week days from 10 a.m. to 5 p.m., also on Thursday Evenings from 7 to 9, Sundays 2 p.m. to 5 p.m. The admission is free to the public on Tuesday, Thursday, Saturday and Sunday. On other days an admission fee of fifteen cents is charged.

By a resolution of the Board of Trustees all regular students of the University may be admitted free on all days of the week by presenting their card of registration.

### TORONTO GENERAL HOSPITAL

The Hospital has 750 beds, and during the last year admitted to its wards 13,698 patients.

The Out-door Department, which has been elaborately equipped with especial attention to the requirements of teaching as well as treatment, is designed to receive and care for several hundred patients each day, if necessity demands. Last year 65,136 out-patients were treated.

The Hospital is for the treatment of acute medical and surgical diseases, and the members of the staff are, in nearly every instance, drawn from the University Medical Faculty.

The Hospital Block contains ten acres, and the group of buildings includes almost everything necessary to enable a student to acquire a practical knowledge of the profession of Medicine.

On the south-west corner is situated the large Pathological Building, which is also an integral part of the Hospital. In it are found the Pathological, Clinical and Chemico-Pathological Laboratories, as well as the Autopsy Room, Museums, etc. The Pathological Building is regarded as one of the most complete in America. There were 322 autopsies during the year.

North of the Pathological Unit is found the Out-Patients' Department already referred to; then follows the Emergency Hospital, fully equipped with every modern device necessary for the immediate care and treatment of emergency patients. In this building arrangements have been made for the teaching and demonstration of practical methods in minor surgery.

The Medical Wing, the Administrative Building and Surgical Wing face College Street. These groups embody every modern requirement in hospital equipment, and special facilities for the student are provided—such as lecture room, cloak room, etc.

Twelve Operating Rooms are to be found in the different Surgical sections. South of the Surgical Wing is located the Obstetrical Hospital with eighty beds. The number of births in this Department last year was 1,192.

The X-Ray Department is one of the most complete on the continent, and averages more than one hundred patients a day sent in for examination. Complete courses are given to the students, so that they can qualify themselves in X-ray work. A well equipped Hydro-Therapeutic Department exists in connection with the X-Ray Department.

## HOSPITAL FOR SICK CHILDREN

This large Hospital, with 262 beds, is entirely devoted to diseases in children, there having been 6,042 cases treated during the last year. In the Out-patient Department, 57,835 patients were attended. The old building has been remodelled and a large new wing has been built on the west side of the present building. These alterations and additions include new operating theatres, out-patient department, pathological laboratories and wards for infectious cases.

## ST. MICHAEL'S HOSPITAL

This institution is conducted as a General Hospital, where medical, surgical and obstetrical cases are admitted. The number of patients admitted last year was 4,637 while 56,261 cases were treated in the out-patient department. There were 442 births in the Obstetrical Department. The accommodation has been enlarged by the addition of a new wing, so that there are now 295 beds. An operating theatre has been provided constructed with all the necessary modern equipment for the practice of antiseptic surgery.

## TORONTO WESTERN HOSPITAL

This is a modern institution affording excellent opportunities for clinical study. During the past year 5,894 patients were admitted. There is an out-door service where dental, tubercular, surgical, medical, gynaecological and special clinics are held; the number of patients treated in the Out-patient Department last year was 33,243.

Two large operating theatres are provided and the operations performed last year numbered 2,033. There were 843 births in the Obstetrical Department.

There are four public wards specially adapted for clinical teaching each containing thirty beds; two of these wards are devoted to medical and two to surgical cases.

## TORONTO PSYCHIATRIC HOSPITAL

The hospital, which is located on Surrey Place on property held by the University of Toronto for this specific purpose, was built by the City of Toronto, and is maintained by the Provincial Government, being directly under the control of the Provincial Secretary.

The functions of the Psychiatric Hospital are defined, and its operations governed by the provisions of *The Psychiatric Hospitals Act, 1926*.

Its purpose is to receive mental and nervous patients from the City of Toronto, especially milder types, for short periods of observation and treatment, and to determine the best method of disposal of other cases which may not be suitable for admission to the hospital.

The activities of the hospital are closely affiliated with those of other hospitals, with the psychiatric service in the Public School System, with the Juvenile Court, and with the local and national committees in Mental Hygiene and the various social service organizations in the city, in linking together public health activities in the field of Mental Hygiene.

There is accommodation for 30 male and 30 female In-patients, there being on each ward 20 beds in open wards and 10 single rooms.

The hospital contains five floors. On the ground floor are the Business Offices, the Out-patient Department, the Lecture Hall and Laboratories. The Lecture Hall has seating capacity for 125 persons. The wards are situated on the first and second floors, the third and fourth providing quarters for the Staff and Personnel.

Both in the Out-patient Department and in the wards opportunity will be provided for instruction in Psychiatry for students in the later years in Medicine. Training in Psychiatric Nursing will be offered pupil nurses from affiliated hospitals, and instruction in Psychiatric Social Service will be available for students in the Department of Social Service.

#### INTERNES IN THE HOSPITALS

A number of resident assistants are appointed annually from the graduates in medicine of Universities, and hold their positions for one or two years.

They will have full opportunities for acquiring experience in the general and special wards of the Hospitals, and during the session they will have charge under the physicians and surgeons in the wards.

## GENERAL INFORMATION FOR STUDENTS

## PHYSICAL TRAINING

By order of the Board of Governors each male student proceeding to a degree must take Physical Training in the First and Second Years of his attendance. In each session in which Physical Training is compulsory he must first undergo a medical examination by the Director of the University Health Service and must then register for Physical Training at the office of the Athletic Association in Hart House. Students of all years who wish to take part in any form of athletics or physical exercise must first undergo a medical examination by the Director to determine the character of his training.

Each woman student proceeding to a Bachelor's Degree in the Faculty of Medicine shall be required, during the first year of her attendance, to take Physical Training, following an examination by the Medical Adviser for Women.

A student who has failed to complete satisfactorily the course in Physical Training prescribed for the First Year will not be permitted to register in the Third Year; and the student who has failed to complete satisfactorily the course in Physical Training prescribed for the Second Year, will not be permitted to register in the Fourth Year.

## DISCIPLINE

The Council of University College and the governing bodies of the federated universities and colleges, respectively, have disciplinary jurisdiction over and entire responsibility for the conduct of their students in respect of all matters arising or occurring in or upon their respective college buildings and grounds, including residences.

The councils of such of the faculties as have assigned for their separate use any building or buildings and grounds, including residences, have disciplinary jurisdiction over and entire responsibility for the conduct of all students in their respective faculties in respect of all matters arising or occurring in or upon such building or buildings and grounds.

In all such cases, and, save as aforesaid, as respects all students to whatever college or faculty they may belong, disciplinary jurisdiction is vested in the Caput, but the Caput may delegate its authority in any particular case or by any general regulation to the council or other governing body of the university or college or faculty to which the student belongs.

If there be any question as to the proper body to exercise jurisdiction in any matter of discipline which may arise, the same shall be determined by the Caput, whose decision shall be final.

Disciplinary jurisdiction includes the power to impose fines.

## REGULATIONS RELATING TO STUDENTS IN ATTENDANCE

No student will be enrolled in any year, or be allowed to continue in attendance, whose presence is deemed by the Council of the Faculty to be prejudicial to the interests of the University.

Students proceeding regularly to the degree are required to attend the courses of instruction and the examinations in all subjects prescribed for students of their respective standing, and no student will be permitted to remain in the University who persistently neglects academic work.

Unless special permission is granted by the Council, a student who, at the close of two sessions in the University, has failed to secure standing in his year, will not be permitted registration in the Faculty of Medicine.

The Students' Administrative Council has been entrusted by the Caput with supervision of the conduct of the students, and subject to the approval of the Caput, has power, through the Students' Court or otherwise to deal with violations of the regulations governing conduct.

All interference on the part of any student with the personal liberty of another by arresting him, or summoning him to appear before any unauthorized tribunal of students, or otherwise subjecting him to any indignity or personal violence, is forbidden by the Caput.

No initiation ceremony involving physical violence, personal indignity, interference with personal liberty or destruction of property, may be held by the students of any Faculty or College of the University under the penalty of suspension or expulsion.

Any ceremony connected with the reception of the First Year desired by any Faculty or College must be prepared and carried out by a Committee of the Senior Year of the Faculty or College concerned with the approval of a joint committee of the Caput and the Students' Administrative Council. The holding of such ceremonies except with this approval shall constitute a breach of discipline.

Any student who may be convicted of having taken part in a parade or procession through the city which has not been authorized by the police authorities after application by the Executive of the Students' Administrative Council, will be severely disciplined.

Students of the Faculty of Medicine on the premises of Colleges or Faculties other than those in which they are registered, shall be subject to the regulations and penalties imposed by the administrative authorities of the premises concerned.

A student who is under suspension, or who has been expelled from a College or from the University, will not be admitted to the University buildings or grounds.

The constitution of every University society or association of students in the Faculty of Medicine and all amendments to any such constitution must be submitted for approval to the Council of the Faculty. All programmes of such societies or associations must, before publication, receive the sanction of the Council of the Faculty through the President. Permission to invite any person not a member of the faculty of the University to preside at or address a meeting of any society or association must be similarly obtained.

The name of the University is not to be used in connection with a publication of any kind without the permission of the Caput.

# THE MEDICAL SOCIETY

This Society consists of the graduates and undergraduates enrolled in the Faculty of Medicine of the University of Toronto. It is under the patronage of the members of the Faculty of Medicine and its object is to deal with all matters pertaining to the general interest and welfare of the students, especially:—

- (a) To encourage interest in general medical science and literature, and in pursuit of medical studies.
- (b) To provide telephones for the convenience of students.
- (c) To be a means of communication between the Student body and the Faculty or others, when such communication is desirable.
- (d) To provide a series of entertainments for students at intervals during the Session.
- (e) To provide assistance to subscribers to the Sick Benefit Fund who become ill during the academic year.
- (f) Each student will be required to pay the annual fee of two dollars to the Bursar, to be divided as follows:—

Medical Society Fee. ....	\$1.00
Athletic Fee. ....	1.00





---

FACULTY OF APPLIED SCIENCE AND  
ENGINEERING

---

## FACULTY OF APPLIED SCIENCE AND ENGINEERING

### HISTORICAL SKETCH

The Legislative Assembly of the Province of Ontario during the Session of 1877 gave its sanction to the establishment of a School of Practical Science on the basis proposed in the memorandum of the Minister of Education confirmed by the Lieutenant-Governor in Council on the 3rd day of February, 1877.

By the scheme thus approved the Government effected an arrangement with the Council of University College whereby the students of the School of Practical Science enjoyed full advantage of the instruction given by its professors and lecturers in all the departments of science which were embraced in the work of the School.

This arrangement was brought to an end in 1889 by the transfer of the department of science, above referred to, from University College to the University of Toronto under the operation of the University Federation Act.

In order that the students of the School might continue to enjoy the advantage of the instruction of the above departments, the Senate of the University of Toronto passed a Statute in October, 1889, affiliating the School to the University, which Statute was confirmed by the Lieutenant-Governor on the 30th day of October, 1889.

By an Order-in-Council, approved by the Lieutenant-Governor on the 6th day of November, 1889, a Principal was appointed, and the management of the School was entrusted to a council composed of the Principal as chairman, and the Professors, Lecturers and Demonstrators appointed on the Teaching Faculty of the School. By the terms of this order the management and discipline of the School was vested in the Council.

On December 14th, 1900, the Senate by Statute, subsequently approved by the Lieutenant-Governor in Council, established a Faculty of Applied Science and Engineering but without assuming any liability for its support or maintenance. Under this Statute the teaching Staff and Examiners of the School of Practical Science became the teaching Staff and Examiners of the Faculty, although the University retained the right to appoint the Examiners for the Bachelor of Applied Science and professional degrees. By the University Act of 1906 the School of Practical Science became the Faculty of Applied Science and Engineering of the University of Toronto.

On April 8th, 1892, the Senate of the University established the Degree of B.A.Sc., which was open to those who held the Diploma of the School and were prepared to devote a fourth year to advanced work. In the Session 1909-1910 a new Course extending over four years and leading to the Degree of B.A.Sc. came into operation, taking the place of the long established Diploma Course of three years, which came to an end in the Session 1910-1911.

## MATRICULATION

A candidate for admission to the First Year in the Faculty of Applied Science and Engineering must produce satisfactory certificates of good character and of having completed the seventeenth year of his age on or before the first of October of the year in which he proposes to register.

He must also present certificates giving him credit in the following subjects of Pass and Honour Matriculation:

## PASS MATRICULATION

ENGLISH (Literature and Composition)

HISTORY (British and Ancient)

MATHEMATICS (Algebra and Geometry)

Any three of:

LATIN (Authors and Composition)

GREEK (Authors and Composition)

FRENCH (Authors and Composition)

GERMAN (Authors and Composition)

{ SPANISH (Authors and Composition) *or*

{ ITALIAN (Authors and Composition)

{ EXPERIMENTAL SCIENCE (Physics and Chemistry) *or*

{ AGRICULTURE (Parts I and II)

\*Arithmetic and Certificates in Mechanical Drawing and shop work from the Principal of the School, accompanied by an approving certificate from the Director of the Technical School Branch of the Department of Education for Ontario.

## HONOUR MATRICULATION

(At least 50%)

ENGLISH (Literature and Composition).

MATHEMATICS (Algebra, Geometry and Trigonometry).

One of:

LATIN (Authors and Composition).

GREEK (Authors and Composition).

FRENCH (Authors and Composition).

GERMAN (Authors and Composition).

SPANISH (Authors and Composition).

ITALIAN (Authors and Composition).

In selecting the options it is recommended that students take French, German and Experimental Science. In the Department of Architecture, French is recommended, in the Departments of Chemical Engineering and Mechanical Engineering it is desirable that students take German. For

\*This option applies to students—and to such students only—who have been in attendance at and matriculate from a Technical School in the Province of Ontario and certified as such by the Department of Education of the Province.

students intending to take Metallurgical Engineering, Spanish and Experimental Science are recommended.

The regulations respecting Matriculation, together with a schedule of examinations which may be accepted as equivalent, may be found in the Curriculum for Matriculation on application to the Registrar of the University.

A candidate from the British Isles must present a certificate showing that he has passed or has exemption from the Preliminary Examination of the Institution of Civil Engineers.

### ADMISSION

Applications for admission must be made on blank forms supplied by the Registrar, and should be forwarded as early as possible to the Registrar of the University, together with all Pass and Honour Matriculation or equivalent certificates.

Applications based upon certificates other than those mentioned will be considered as occasion may require. Such certificates must be accompanied by an official statement of the marks in the various subjects upon which the certificate was granted.

#### ADMISSION *AD EUNDEM STATUM*

An undergraduate of another University may be admitted *ad eundem statum* on such conditions as the Senate on the recommendation of the Council of the Faculty may prescribe.

An applicant for admission *ad eundem statum* must submit with his petition (1) a calendar of his University giving a full statement of the courses of instruction; (2) an official certificate of character and academic standing.

### REGISTRATION

Students in any year will be required to register in person on the date specified in the Calendar for the registration of students in that year. Those who present themselves on subsequent days must petition the Council to be allowed to register. Every petition for registration subsequent to the said date must be accompanied by a sum of money reckoned at one dollar per diem for each day thereafter. For sufficient cause the whole or part of such a sum may be refunded.

Council reserves the right to reject applications of, or impose penalties upon, those who fail to report on the dates specified. It is important that students should be in attendance in the laboratories and at lectures from the date of registration.

### ENQUIRIES

Enquiries with reference to requirements of admission to the Faculty of Applied Science and Engineering are to be addressed to the Registrar of the University.

Communications relating to curricula, instruction, examinations and standing therein, in the Faculty of Applied Science and Engineering are to be addressed to the Secretary of the Faculty.

### DEGREES

#### *Degree of Bachelor of Applied Science (B.A.Sc.)*

#### *Degree of Bachelor of Architecture (B.Arch.)*

There are six graduating Departments leading to the Degree of Bachelor of Applied Science (B.A.Sc.) and one graduating Department leading to the Degree of Bachelor of Architecture (B.Arch.), viz.,

1. Civil Engineering.
2. Mining Engineering.
3. Mechanical Engineering.
4. Architecture.
5. (Discontinued.)
6. Chemical Engineering.
7. Electrical Engineering.
8. Metallurgical Engineering.

Prescription of the courses in these Graduating Departments are given on pages 508, 513, 516, 519, 522, 525, 528.

In the fourth year, optional courses are arranged in certain departments. Students are required to submit their selection to the Secretary in writing, not later than September 15th. The proposed selection must be approved by Council before adoption.

#### *Degree of Master of Applied Science (M.A.Sc.)*

#### *Degree of Master of Architecture (M.Arch.)*

Graduates holding the Degree of B.A.Sc. of this University or those holding the degree of another University recognized as equivalent, may take post-graduate work proceeding to the Degree of Master of Applied Science (M.A.Sc.). (For requirements, see page 111.)

Graduates holding the Degree of B.Arch. or B.A.Sc. in Architecture of this University, or those holding the Degree of another University recognized as equivalent, may take post-graduate work proceeding to the Degree of Master of Architecture (M.Arch.). (For requirements, see p. 577.)

### *Professional Degrees*

Graduates in Applied Science and Engineering, and graduates of the School of Practical Science, may, after three years spent in professional work, present themselves for the degrees of Civil Engineer (C.E.), Mining Engineer (M.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), Chemical Engineer (Chem. E.), Metallurgical Engineer (Met. E.), as the case may be, subject to the rules and regulations established by the University. (See page 577.)

## FEES

All fees are payable at the Bursar's office between the hours 10 a.m. and 1 p.m. of each week day except Saturday (or may be remitted by mail).

The annual fees, including tuition, library, laboratory supplies and one annual examination for each year, shall be as follows:

If paid in full on or before November 5th..... \$150.00  
If paid by instalments.—

First instalment, if paid on or before November 5th..... 75.00

Second instalment, if paid on or before February 5th..... 78.00

Repeating the year—If paid in full on or before November 5th.. 75.00

The above fees are payable in advance. After November 5th a penalty of \$1.00 per month will be imposed until the whole amount is paid. In the case of payment by instalments the same rule as to penalty will apply.

Students must have paid the fees due in the first term before proceeding to the work of the second term.

## GENERAL FEES

Matriculation, or registration of Matriculation.....	\$ 5.00
Supplemental examination.....	10.00
Admission <i>ad eundem statum</i> .....	10.00
Degree of B.A.Sc. (Payable Apr. 1st).....	10.00
Degree of B. Arch. (Payable Apr. 1st).....	10.00
Physical Training (see page 23).....	5.00
Supplemental Physical Training (see page 23).....	10.00
Hart House (see below).....	8.00
Students' Administrative Council (see page 23).....	4.00

## DUES AND DEPOSITS

All dues and deposits are payable at the office of the Faculty at the time of Registration. Cheques must be made out in favour of "Faculty of Applied Science and Engineering".

Engineering Society membership..... \$2.00

Athletic Association membership..... 2.00

Annual deposit, Departments 1, 3, 4, 7..... 8.00

Departments 2, 6, 8..... 8.00

Charges for waste, neglect and breakage are to be met out of the deposit fee, the balance of which will be refunded to the student at the end of the session on application to the Secretary.

If the foregoing deposits do not cover the cost of breakage due to carelessness or neglect, the balance shall be paid by the student to the Secretary.

## HART HOUSE FEE

Every male student in attendance, proceeding to a Bachelor's Degree in the Faculty of Applied Science and Engineering, is required to pay to the Bursar before December 1st the annual fee of eight dollars for the

maintenance of Hart House. If this fee is not paid by the above date a penalty of two dollars will be imposed, making the total fee ten dollars.

#### STUDENTS' ADMINISTRATIVE COUNCIL FEE

Every student in attendance, proceeding to a Bachelor's Degree in the Faculty of Applied Science and Engineering, is required to pay to the Bursar at the time of the entry of his name with the Secretary the annual fee of four dollars for the support of the Students' Administrative Council.

#### PHYSICAL TRAINING FEE

Every male student in attendance proceeding to a Bachelor's Degree in the Faculty of Applied Science and Engineering is required to pay to the Bursar the annual Physical Training fee of \$5.00 at the opening of each session in which Physical Training is compulsory for that student.

A student who has failed to complete satisfactorily the course in Physical Training prescribed for the First Year will not be permitted to register in the Third Year; and the student who has failed to complete satisfactorily the course in Physical Training prescribed for the Second Year will not be permitted to register in the Fourth Year.

Every student who has neglected to complete satisfactorily the course in Physical Training of the First or Second Year, and who must take this work during the Second or Third Year respectively of his course, will be required to pay to the Bursar at the opening of the session a Supplemental Fee of \$10.00, in addition to the prescribed Physical Training fee.

#### SCHOLARSHIPS AND PRIZES

Through the generosity of friends of the University, encouragement has been given to both undergraduate and graduate work in the various branches, by establishing the following scholarships and prizes:

Name of Scholarship	Years Eligible	Amount	Described on page
Mrs. M. W. Baptie. ....	I	\$100	490
Harvey Aggett. ....	II	\$ 75	490-
Boiler Inspection & Insurance Co. . . .	III	\$150	490
Jenkins Brothers, Limited. ....	III	\$100	490
Toronto Architectural Guild. ....	IV	....	491
B.A.A.S. Medal. ....	IV	....	491
C. J. Rhodes. ....	II, III, IV	£300	491
Khaki University & Y.M.C.A. ....	II, III, IV	Loans	493
Jardine Memorial. ....	All	\$100	493
F. W. Jarvis Bursaries. ....	All	\$50	493
S. Ubukata. ....	All	....	493
U. of T. War Memorial. ....	All	\$250	494
Æneas McCharles. ....	All & Grad.	\$1,000	494
1851 Exhibition. ....	Graduate	£250	495
Nipissing Mining Co. ....	Graduate	\$1,100	497

## THE BAPTIE SCHOLARSHIP

The Baptie Scholarship is derived from a bequest under the will of the late Mrs. Margaret W. Baptie, of Ottawa, and the Board of Governors has directed that from the income therefrom a scholarship of One Hundred Dollars shall be awarded for Engineering students on the record of their first year. . . . The Board of Governors also authorizes a remission of fees in the case of the holder of the scholarship up to Seventy-five Dollars.

The conditions of the award are as follows: That the scholarship be awarded to the student who, in the Annual Examinations of the First Year, enrolled in any one of the departments of Civil Engineering, Mining Engineering, Mechanical Engineering, Chemical Engineering, Electrical Engineering or Metallurgical Engineering, obtains the highest aggregate percentage of marks in those subjects which are common to the First Year curricula of those departments. The first award is to be made on the results of the Annual Examinations of the Session 1925-26.

## HARVEY AGGETT MEMORIAL SCHOLARSHIP

This scholarship was donated by Mr. J. T. Aggett, of Toronto, as a perpetual memorial to his son, the late Lieutenant Harvey Aggett, who enlisted in March, 1915, during his second year in this Faculty, and was killed in action at Passchendaele on 6th November, 1917.

This annual scholarship of the value of seventy-five dollars is to be awarded to a student of the second year in this Faculty who, obtaining honours and being one of the first three in his year by his standing at the annual examinations, has been adjudged highest of the three in general student activities and service in the University during his period of attendance.

## BOILER INSPECTION AND INSURANCE COMPANY SCHOLARSHIP

The Boiler Inspection and Insurance Company of Canada offers a Scholarship in the Department of Mechanical Engineering of the value of \$150.00 to the student who obtains highest Honour Standing in the regular examinations of the third year.

The successful candidate will be expected to proceed to his fourth year during the session next following the date of the award.

The amount of the award will be credited by the Bursar to the fees of the fourth year of the successful candidate.

## JENKINS SCHOLARSHIP IN ENGINEERING

The Jenkins Scholarship in Engineering, presented by Jenkins Bros., Limited, has been donated to continue for a period of five years, the first award to be made in 1925.



This annual scholarship, of the value of One Hundred Dollars, is to be awarded to the student of the third year registered in one of the six departments of Civil, Mining, Mechanical, Chemical, Electrical or Metallurgical Engineering, who has the highest aggregate of percentages for the first, second and third years, relative to the requirements of his department.

#### TORONTO ARCHITECTURAL GUILD MEDAL

The Toronto Architectural Guild was the organization of local architects from which sprung the Ontario Association of Architects. When the new and wider association became firmly established, the Guild disbanded and handed over to a trustee board certain funds for the establishment of a Medal to be awarded in the Department of Architecture of the University of Toronto.

The Trustee Board, now that the fund has accumulated considerably, announces its intention of awarding this medal annually to a senior student showing outstanding ability in Architectural Design.

#### MEDAL FROM MEMBERS OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

A Bronze Medal has been donated for students of the Faculty of Applied Science and Engineering by members of the British Association for the Advancement of Science. This Medal will be awarded to the student of the Fourth Year, in any department, who, taking honours, obtains the highest aggregate percentage, in practical and written examinations in the year.

#### THE RHODES SCHOLARSHIP

The trustees of the late Mr. C. J. Rhodes have assigned two of the Rhodes Scholarships to the Province of Ontario.

These scholarships will hereafter be thrown into open competition in the Province, subject to the following conditions:—

1. Candidates must be British subjects, with at least five years' domicile in Canada, and unmarried. They must have passed their nineteenth, but not have passed their twenty-fifth birthday, on October 1st of the year for which they are elected.
2. Candidates must be at least in their Sophomore Year at some recognized degree-granting University or College of Canada, and (if elected) complete the work of that year before coming into residence at Oxford.
3. Candidates may compete either in the Province in which they have acquired any considerable part of their educational qualification, or in the Province in which they have their ordinary private domicile, home or residence.

In each Province there is a Committee of Selection, appointed by the Trustees, in whose hands the nominations will rest. The Secretary of the Committee of Selection for Ontario is D. R. Michener, Esq., Barrister, Continental Life Building, Toronto 2.

The Committees of Selection are instructed to bear in mind the suggestions of Mr. Rhodes, who wished that, in the choice of his Scholars, regard should be had to

- (a) Force of character, devotion to duty, courage, sympathy, capacity for leadership.
- (b) Ability and scholastic attainments.
- (c) Physical vigor, as shown by participation in games or in other ways.

Every candidate for a Scholarship is required to furnish to the Committee of Selection for his Province the following:—

- (a) A certificate of age.
- (b) A photograph preferably unmounted and not larger than 4×7 inches.
- (c) A written statement from the President or Acting President of his College or University to the effect that his application as a suitable candidate is approved.
- (d) Certified evidence as to the courses of study pursued by the Scholar at his University, and as to his gradings in those courses. This evidence should be signed by the Registrar, or other responsible official, of his University.
- (e) A brief statement by himself of his athletic and general activities and interests at College; and of his proposed line of study at Oxford.
- (f) Not more than four testimonials from persons well acquainted with him.
- (g) References to four other responsible persons, whose addresses must be given in full, and of whom two at least must be professors under whom he has studied.
- (h) Medical certificate.

It is in the power of the Committee of Selection to summon to a personal interview such of the candidates as they find desirable to see, and, save under exceptional circumstances, no Scholar will be elected without such an interview. Where such an interview is dispensed with, a written statement of the reasons will be submitted to the Trustees.

The next appointments will be made for 1928; applications for these Scholarships with all required material must reach the Secretary of the Committee of Selection not later than October 20th, 1927.

Each Scholarship is of the value of £400 a year, and is tenable for three years, subject to the continued approval of the College at Oxford of which the Scholar is a member.

Rhodes Scholars, from this Faculty:—

W. J. Browne, B.A.Sc., 1919.

D. W. Dow, 1925.

**THE KHAKI UNIVERSITY AND Y.M.C.A. MEMORIAL SCHOLARSHIP FUND**

The Khaki University and Y.M.C.A. Memorial Scholarship Fund was established by the Khaki University Committee. At the present time this fund is being used to make loans to returned-soldier students of the higher years. Applications for such loans should be made to the President of the University.

**THE JARDINE MEMORIAL PRIZE FOR ENGLISH VERSE**

1. This prize, of the value of \$100, is the gift of the late Mrs. T. Herbert Barton in memory of her brother Flight-Lieutenant Gordon Jardine, and is open to any regular undergraduate student who has been in actual attendance at the University during the academic year preceding the date of submission (November 1) or who graduated in the previous academic year.

2. The subject and metre of the poem shall be left to the choice of the competitor.

3. The poems shall be in the hands of the Registrar of the University by November 1st.

4. Each poem shall be signed with a pseudonym and the competitor's name shall be submitted to the Registrar in a sealed envelope on which the pseudonym shall be written.

5. With his or her name the competitor shall enclose a signed statement that the poem is absolutely his or her original work.

6. The competition shall be judged by a board of five examiners, consisting of the head of the Department of English in each of the four colleges, and of a fifth examiner to be chosen by these four.

7. The examiners shall have the power to withhold the award in any year if no poem which has been submitted for that year be found worthy of the prize.

**THE UBUKATA FUND**

The S. Ubukata Fund of \$10,000, the gift of Mr. S. Ubukata, provides for the establishment of prizes, medals, scholarships and loans for which Japanese students of all faculties and colleges may be eligible. Information regarding the conditions of award may be obtained from the Registrar of the University.

**THE F. W. JARVIS BURSARIES**

Two Bursaries, known as "The F. W. Jarvis Bursaries", of the value of \$50 each, the gift of A. H. Jarvis, Esq., of Ottawa, brother of F. W. Jarvis, to be awarded under the following conditions:

1. These Bursaries are open only to former students of Ottawa Collegiate Institute (Lisgar Street), who without some such assistance may not be able to carry on their academic courses.

2. They may be awarded at Matriculation or in any year of an undergraduate course in any Faculty of the University.

3. They shall be awarded preferably one to a man and the other to a woman student; but if in any year students of opposite sexes do not apply, both Bursaries may be awarded to men or to women.

4. A Bursary may be held in successive years by the same student and also in conjunction with any scholarship awarded by the University or the federated colleges.

5. The Bursaries shall be awarded by the Senate of the University on the recommendation of a Committee of Award consisting of the President of the University, the Principal of Ottawa Collegiate Institute and the donor; candidates shall make application for the same not later than May 15th on the special form to be obtained from the Registrar.

#### THE UNIVERSITY OF TORONTO WAR MEMORIAL SCHOLARSHIPS

Four Scholarships, each of the value of two hundred and fifty dollars have been established by the Alumni Federation of the University from the War Memorial Fund to be awarded to students in the Faculties of Applied Science and Engineering and Forestry.

The general basis on which scholarships may be awarded shall be as follows: (a) Standing in course of studies. (b) Need of assistance. (c) Merit as shown in extra-academic activities—executive, literary, dramatic, athletic, etc. (d) Relationship, if any, to active service during the War.

Information regarding these scholarships may be obtained from the Secretary-Treasurer of the Alumni Federation, Room 225, Simcoe Hall, to whom applications for the same must be made not later than Feb. 15th.

#### THE McCHARLES PRIZE

This prize was established in connection with the bequest of the late *Aeneas* McCharles of Provincial Government bonds of the value of \$10,000, and is awarded on the following terms and conditions, namely, that the interest therefrom shall be given from time to time, but not necessarily every year, like the Nobel prizes in a small way: (1) To any Canadian from one end of the country to the other, and whether student or not, who invents or discovers any new and improved process for the treatment of Canadian ores or minerals of any kind, after such process has been proved to be of special merit on a practical scale; (2) Or for any important discovery, invention or device by any Canadian that will lessen the dangers and loss of life in connection with the use of electricity in supplying power and light; (3) Or for any marked public distinction achieved by any Canadian in scientific research in any useful practical line. The following conditions, as passed by the Board of Governors, determine the method of award:—

(1) The title shall be the McCharles Prize.

(2) The value of the prize shall be One Thousand Dollars (\$1,000.00) in money.

(3) The term "Canadian" for the purpose of this award shall mean any person Canadian born who has not renounced British alliance; and for the purpose of the award in the first of the three cases provided for by the bequest, domicile in Canada shall be an essential condition.

(4) Every candidate for the prize shall be proposed as such in writing by some duly qualified person. A direct application for a prize shall not be considered.

(5) No prize shall be awarded to any discovery or invention unless the same shall have been proved to the satisfaction of the awarding body, to possess the special practical merit indicated by the terms of the bequest.

(6) The order of priority in which the three cases stand in the wording of the bequest shall be observed in making the award; that is, the award shall go *caeteris paribus* to the inventor of methods of smelting Canadian ores; and, failing such inventions, to the inventor of methods for lessening the dangers attendant upon the use of electricity; and only in the third event, if no inventors of sufficient merit in the field of metallurgy and electricity present themselves, to the inventor distinguished in the general field of useful scientific research.

(7) The first award was made in 1910.

(8) The composition of the awarding body shall be as follows:—

An expert in Mineralogy,

An expert in Electricity,

An expert in Physics,

and four other persons. All of the members of this body shall be nominated by the Board of Governors of the University of Toronto.

#### THE 1851 EXHIBITION SCIENCE RESEARCH SCHOLARSHIP

The Royal Commissioners for the Exhibition of 1851, if satisfied with the qualifications of the candidates put forward, will each year allot three Science Research Scholarships to Canada. The University of Toronto has been invited to recommend annually one or more candidates in order of merit for these Scholarships.

1. Each candidate recommended must be a British subject and under twenty-six years of age, except under very special circumstances; he must be a bona fide student of Science of not less than three years' standing; he must also have completed a full University course and have spent at least one full academic year at this University prior to the date of recommendation.

2. The record of a candidate's work must indicate high promise of capacity for advancing science or its applications by original research. Evidence of this capacity, which is the main qualification for the Scholarship, is strictly required. The most suitable evidence is a satisfactory account by the candidate of research work already performed, and the

Commissioners will decline to consider the claims of a candidate unless such an account is furnished, or unless there is other equally distinct evidence that he possesses this qualification.

3. Applications for these Scholarships must be made to the Registrar of the University not later than April 15th; the latest date on which the recommendation of the University of Toronto for Scholarships offered in 1923 can be received at the Office of the Commissioners is June 1st, 1923.

4. Each Scholarship is of the value of £250 per annum, payable quarterly in advance; on presenting to the Commissioners a satisfactory final report at the expiration of his Scholarship the scholar will receive a grant of £25. A scholar who is not in a position to travel at his own expense, or for whom it is not possible to obtain free passage, may make application to the Commissioners for aid towards the payment of his fare from his home to his place of study. A Scholar will receive an additional annual allowance, not exceeding £30, towards the cost of University fees, if, in the opinion of the Commissioners, he is in need of such allowance.

5. The Scholarship will be tenable ordinarily for two years, and in cases of exceptional merit for three years. The continuation of a Scholarship for a second year will depend upon the satisfactory nature of the scholar's first year's work. Renewal for a third year will be granted only where it appears that the renewal is likely to result in work of scientific importance.

6. The scholar will be required to devote himself to research in some branch of pure or applied science, the particular nature of the work proposed to be approved by the Commissioners.

7. A scholarship may be held, with the approval of the Commissioners, at any Institution in the United Kingdom or abroad, but a scholar will not be permitted, except under very special circumstances, to conduct his investigations in the country in which he has received his scientific education.

8. Scholars will be required to furnish reports of their work at the end of each year of tenure of their scholarships.

9. Scholars will be required to devote their whole time to the objects of the scholarship, and will be forbidden to hold any position of emolument which carries with it a duty inconsistent with their obligation to the Commissioners. Scholars must in any case obtain the consent of the Commissioners before accepting any additional emoluments.

10. In case of misconduct on the part of a scholar the Commissioners may, at their absolute discretion, deprive him of his scholarship and all emoluments therefrom.

The regulations adopted by the Senate are as follows:—

The departments, students of which shall be eligible to be candidates, are:—1. Bacteriology; 2. Biochemistry; 3. Botany; 4. Chemistry; 5. Engi-

neering (chemical); 6. Engineering (civil); 7. Engineering (electrical); 8. Engineering (mechanical); 9. Engineering (metallurgical); 10. Engineering (mining); 11. Forestry; 12. Geology; 13. Mineralogy; 14. Physics; 15. Physiology; 16. Zoology.

A student shall not be deemed to be ineligible because of his being on the teaching staff of the University, if he has not been in receipt of a salary of more than \$800 per annum and has not been on the teaching staff for more than two years from graduation.

A student shall be deemed to be eligible in the year in which he intends to graduate, but if nominated for the Scholarship his nomination shall be subject to his being successful in passing his examination for his degree.

The nomination of the candidate or candidates shall be made by a Board composed of seven members appointed by the Senate, and the Board shall consist of the Chancellor, the President, the Reverend Dr. Bowles, the Honourable Mr. Justice Masten, the Honourable W. E. Raney, Dr. J. A. Worrell and Dr. C. Morse, and the Board shall have power to call to its aid as assessor any member of the teaching staff.

#### THE NIPISSING MINING COMPANY RESEARCH FELLOWSHIP

The Nipissing Mining Company has endowed a Research Fellowship in the Department of Mining Engineering to be known as The Nipissing Mining Company Research Fellowship, of the annual value of eleven hundred dollars (\$1,100.00).

This Fellowship is open to the graduates of any University.

#### JUNIOR INSTRUCTORSHIPS

Provision is made for the sessional appointment in various departments of graduates as Fellows or Demonstrators, whose duties shall consist of aiding in the work of instruction under the direction of the department concerned.

Applications for appointment should be made in writing to the Secretary of the Faculty not later than September 1st.

#### RESEARCH ASSISTANTSHIPS

A number of research assistants in the School of Engineering Research are appointed annually on salary, in the various departments, to carry on the work of research under the direction of members of the staff. This work is accepted as partial fulfilment of the requirements for the degrees of M.A.Sc. and M.Arch. These research assistants are usually recent graduates and are chosen from among those who have displayed special capacity for investigational work in their undergraduate courses. Prospective applicants should consult with members of the staff as soon as possible after the annual examinations.

## REGULATIONS RESPECTING EXAMINATIONS

## REGULAR EXAMINATIONS

Promotions from one year to another are made on the results of the term work and the annual examinations. A Student proceeding to a degree must pass all the term work and the examinations in the subjects of his course and at the periods arranged from time to time by the Council.

Candidates who fail to pass in any year will be required to take again the whole course of instruction, both theoretical and practical, of the year in which they fail before presenting themselves a second time for examination. (This repetition includes vacation work.)

A student who in either term of the session fails to perform the work of his course in a manner satisfactory to the professors in charge, will not be allowed to present himself at the final examinations of the year.

In the second, third and fourth years annual examinations will be held at the beginning of the second term on all subjects completed during the first term.

No student will be allowed to write at any examination who has not paid all fees and dues for which he is liable at that time.

The pass marks required on written examinations is 40% and on practical examinations 60%.

Honours will be granted in each department to the students who obtain at least 50 per cent. in each subject, and 75 per cent. of the total number of marks allotted to the department at the annual examinations.

Honour Graduate standing will be granted to those who obtain honours in the final and in one previous year.

## TERM EXAMINATIONS

Term examinations may be held in any subject and at any time at the discretion of the instructor or by order of the Council, and the results of such examination may, if the Council so decides, be incorporated with those of the annual examinations in the same subjects.

## SUPPLEMENTAL EXAMINATIONS

A candidate who fails in one or two subjects at the Annual Examinations will be required to take supplemental examinations in such subjects; but no student will be allowed a supplemental examination in the laboratory work of the fourth year, those reported as failing to attain the required standard in this laboratory work not being allowed to present themselves at the final examinations.

The supplemental written examinations will begin on the 21st day of September, 1927. Notice in writing of his intention of taking such examinations (including practical ones) must be received from the candidate by the Secretary of the Faculty, and the fee of \$10.00 received by the Bursar, not later than the first of September. Council reserves the right to reject applications of, or impose penalties upon, those failing to comply



with these requirements. Arrangements will be made to conduct supplemental examinations at the Survey Camp for those students in attendance.

In the case where a candidate desires to write upon an annual examination as a supplemental his application must be received by the Secretary, and his fee by the Bursar, for the January examinations not later than the first of December and for the April examinations not later than the first of March.

Where a candidate fails to pass a supplemental examination it will be counted as one of the two supplemental examinations which may be allowed him after the next annual examination.

No student will be permitted to take the work required for a laboratory supplemental examination at any time other than the regular time of the session.

#### OFFICE EXPERIENCE

##### *Department of Architecture*

Candidates for the degree of Bachelor of Architecture will be required to submit to Council satisfactory evidence of having worked at least eight months in the office of a member of the Ontario Association of Architects before receiving their degrees. Evidence of work in the office of an architect residing outside of the Province may be substituted, providing that he is a member of the local professional organization.

N.B.—This regulation will be effective for and after the session 1928-1929.

#### FIELD EXPERIENCE

##### *Department of Mining Engineering*

The following are the regulations governing field experience certificates:

A candidate for the degree in the Department of Mining Engineering will be required to present satisfactory evidence of having had at least six months' practical experience in work connected with mining, metallurgy or geology, for which he must have received regular wages.

The time may be spent on geological survey, in ore dressing, smelter or lixiviation works, in an assay office in the vicinity of mining or metallurgical works, on any work in or about a mine other than as an office man or clerk, or in prospecting. Not more than three months on geological surveys will be accepted, and prospecting will only count one-half (*i.e.*, four months' prospecting will be counted as two months) and must not be submitted for more than three of the six months.

Certificates must be made out, signed, countersigned and sent during the first term to the Secretary of the Faculty of Applied Science and Engineering, who will retain them.

### SHOP WORK

#### *Departments of Mechanical and Electrical Engineering*

Students in Mechanical and in Electrical Engineering are not granted their degree until certificates have been submitted to the Council, and accepted as satisfactory, showing not less than 1,600 hours of mechanical experience in production under commercial conditions. Preferably the work undertaken should be in one of the manufacturing industries or trades with which the course is related. Certificates, on the standard form which may be procured from the Secretary, must be presented on or before the 1st of March of any year.

It is not desirable that a student in these courses should enter the engineering industries without having acquired some experience in mechanical production and it is therefore required that he obtain this experience under commercial conditions, so that he can appreciate shop conditions and limitations.

### REGULATIONS RESPECTING TERM WORK

Students working in any laboratory must be governed by the regulations relating thereto as made known from time to time.

No laboratory reports or drawings may be removed from the laboratories without permission. The Council reserves the right to dispose of them as may be thought proper.

No drawings or briefs will be accepted which have not been made in the drafting rooms, and during the hours allotted to such work.

### FIELD WORK

Field Work in Surveying of the First and Second Years will be taken on the University grounds, during the first term.

No field notes will be accepted which have not been taken in the field and during the hours allotted to such work.

Students taking practical astronomy are required to take observations in the field for time, latitude and azimuth.

### DEPARTMENTAL EXCURSIONS TO POINTS OF INTEREST

As a part of Laboratory Instruction excursions to points of technical interest, both in Toronto and elsewhere, are arranged by the staff. These excursions are treated as laboratory periods with the same requirements as to attendance and reports. The total transportation costs in any one year will probably not exceed Ten Dollars.

### SUMMER SURVEY SESSION

Students in Departments 1 and 2 will be required to take the Survey Camp between the second and third years, and on failure to do so this work will be taken as a supplemental in the third year. The work will be taken

previous to the opening of the fall term, during the months of August and September at the University Survey Camp, situated on the shore of Gull Lake, and about five miles from the Village of Minden (Lot No. 9 in 13th Concession of the Township of Lutterworth). The camp may be reached by taking the train leaving Lindsay for Haliburton, and getting off at Gelett. Conveyances will be on hand to meet students and take them to the camp. Personal effects must be limited to sixty pounds in weight, which must include two pairs of blankets, or their equivalent; beds and mattresses only will be provided.

A field course in Geology is given to students in Department 2 the last week of the session at the camp.

Students will report at the camp on the dates shown on page 7.

Students of the Fourth Year in Department 1 who are taking the Astronomy Option are required to spend two weeks at the camp, beginning September 8th, after completing their Third Year.

#### THESIS

In the Fourth Year each student is required to prepare a thesis. The title, form and time for handing in will be determined for each Department as provided in the prescription, 285, page 576. It shall become the property of the University.

The thesis of each student who works upon a research problem in his fourth year must deal with the subject of investigation. In such cases the theses must be handed in not later than one week prior to the close of the annual examinations.

### REGULATIONS RESPECTING STUDENTS IN ATTENDANCE

All interference on the part of any student with the personal liberty of another by arresting him, or summoning him to appear before any unauthorized tribunal of students, or otherwise subjecting him to any indignity or personal violence, is forbidden by the Caput.

A student who is under suspension, or who has been expelled from a College or from the University, will not be admitted to the University buildings or grounds.

The name of the University is not to be used in connection with a publication of any kind without the permission of the Caput.

No student will be enrolled in any year, or be allowed to continue in attendance, whose presence is deemed by the Council to be prejudicial to the interests of the University.

Students proceeding regularly to the degree are required to attend the courses of instruction and the examinations in all subjects prescribed for students of their respective standing, and no student will be permitted to remain in the University who persistently neglects academic work.

Unless special permission is granted by the Council, a student who, at the close of two sessions in the University, has failed to secure standing in his year, will not be permitted registration in the Faculty of Applied Science and Engineering.

The constitution of every University society or association of students in the Faculty of Applied Science and Engineering and all amendments to any such constitution must be submitted for approval to the Council of the Faculty. All programmes of such societies or associations must, before publication, receive the sanction of the Council of the Faculty through the Dean. Permission to invite any person not a member of the Staff of the University to preside at or address a meeting of any society or association must be similarly obtained.

The Students' Administrative Council has been entrusted by the Caput with supervision of the conduct of the students, and subject to the approval of the Caput, has power, through the Students' Court or otherwise to deal with violations of the regulations governing conduct.

No initiation ceremony involving physical violence, personal indignity, interference with personal liberty or destruction of property, may be held by the students of any Faculty or College of the University under the penalty of suspension or expulsion.

Students of the Faculty of Applied Science and Engineering, on the premises of Colleges or Faculties other than those in which they are registered, shall be subject to the regulations and penalties imposed by the administrative authorities of the premises concerned.

Any ceremony connected with the reception of the First Year desired by any Faculty or College must be prepared and carried out by a Committee of the Senior Year of the Faculty or College concerned, with the approval of a joint committee of the Caput and the Students' Administrative Council. The holding of such ceremonies except with this approval shall constitute a breach of discipline.

Any student who may be convicted of having taken part in a parade or procession through the city which has not been authorized by the police authorities after application by the Executive of the Students' Administrative Council, will be severely disciplined.

### EXEMPTIONS

Applications for exemption from any of the regulations shall be made to the Council in writing and the particulars of the case fully stated.

A student shall submit to Council evidence of illness or other handicap which occurs during the session immediately after its occurrence: no petition for leniency on account of such incidents will be considered if received after the third day following the last day of examinations.

### GENERAL INFORMATION FOR STUDENTS

The Council of University College and the governing bodies of the federated universities and colleges, respectively, have disciplinary jurisdiction over and entire responsibility for the conduct of their students in respect of all matters arising or occurring in or upon their respective college buildings and grounds, including residences.

The councils of such of the faculties as have assigned for their separate use any building or buildings and grounds, including residences, have disciplinary jurisdiction over and entire responsibility for the conduct of all students in their respective faculties in respect of all matters arising or occurring in or upon such building, or buildings and grounds.

In all such cases, and, save as aforesaid, as respects all students to whatever college or faculty they may belong, disciplinary jurisdiction is vested in the Caput, but the Caput may delegate its authority in any particular case or by any general regulation to the council or other governing body of the university or college or faculty to which the student belongs.

The Caput has also power and authority to determine by general regulations, or otherwise, to what college, faculty or other body the control of university associations belongs.

If there be any questions as to the proper body to exercise jurisdiction in any matter of discipline which may arise, the same shall be determined by the Caput, whose decision shall be final.

Disciplinary jurisdiction includes the power to impose fines.

Information as to the text-books, instruments and materials to be purchased by the students will be given on registration at the beginning of the session.

## HART HOUSE

Hart House, the gift of the Massey Foundation, is so called in memory of Mr. Hart Massey. In its widest interpretation it seeks to provide for all the activities in the undergraduate's life apart from the actual work in the lecture room. It affords all the facilities of a first-rate club. In the beauty of its architecture and the various functions which it performs it is unique on this continent.

Hart House contains completely equipped club rooms, including common rooms, reading room, music room, lecture room, sketch room, photographic dark rooms, the Great Hall, which is the students' dining hall, a small Chapel, rooms reserved for religious organizations in the University, gymnasium, squash courts, swimming pool, running track, rifle range, billiard room, library and Hart House Theatre.

Hart House is open from 8.00 a.m. to 11.00 p.m. daily and meals are served in the Great Hall throughout the academic year. Members are entitled to full privileges of all rooms in the building between these hours and the use of the gymnasium, pool, showers and locker rooms until 6.30 p.m. each day, except Sunday, subject to the regulations of the Athletic Association.

The Library contains a good selection of books of general interest. These books must not be taken from the room.

Sunday Evening Concerts are given by the leading musicians of the city at 9 p.m. in the Great Hall on certain Sundays during the session and music recitals take place at 5 p.m. every Friday in the Music Room.

The Sketch Room is equipped with facilities for drawing and painting. Weekly drawing and painting classes are given by a qualified instructor and frequent exhibitions of pictures and lectures on Art are arranged.

A group of rooms is set apart for the use of the Faculty Union. A dining room and a common room are also reserved for Graduate Members. Six bed-rooms are available for the use of guests at a reasonable charge.

The Warden is entrusted with the general supervision of the whole house in co-operation with the following committees: House, Hall, Library, Music, Billiard, Sketch, Camera and Squash. These committees consist of two senior members, a graduate member, the Warden and a full representation of undergraduates. The undergraduates are elected annually by their fellow students. The Board of Stewards is the Senior Committee and has final control of the House, being directly responsible to the Board of Governors. It consists of the Warden (*ex officio* chairman) and representatives of the President of the University, the Board of Governors, the Faculty Union, the Athletic Association, the Graduate Members, the Student Christian Association, the Students' Administrative Council and the undergraduate secretaries of all Standing Committees.

All male undergraduates proceeding to a degree in the University are members of Hart House. The annual fee of \$8.00 covers all fees in connection with Hart House and membership in the Athletic Association for the academic year (September to May). Membership Cards may be obtained at the Warden's Office on presentation of the Bursar's receipt for fees paid.

Hart House has no endowment whatsoever and is entirely dependent for its upkeep on the fees received from graduates and undergraduates and from various sources of revenue in the House itself.

Other male students in the University, or students in the affiliated or federated institutions receiving instruction in the University, may become members of Hart House on payment of the required fee at the Warden's office.

Graduates are entitled to the full privileges of Hart House on payment of an annual fee of \$10.00. Out-of-town graduates may become members on payment of an annual fee of \$2.50.

#### HART HOUSE THEATRE

Hart House Theatre is a Repertory Theatre existing to promote the interests of dramatic art in the widest sense. Its performances are open to members of the University and to the general public. The Theatre is operated by a Board of Syndics, who are responsible to the Governors of the University for its administration. It is the policy of the Syndics to permit the use of the Theatre by those dramatic societies within the University which are endeavouring to do serious work.

#### STUDENTS' ADMINISTRATIVE COUNCIL

The Students' Administrative Council has been entrusted by the **Caput** with supervision of the conduct of the students, and has power subject to the approval of the Caput to deal with violations of the regulations governing conduct.

Any student who may be convicted of having taken part in a parade or procession through the city which has not been authorized by the police authorities after application by the Executive of the Students' Administrative Council, will be severely disciplined.

#### UNIVERSITY OF TORONTO ATHLETIC ASSOCIATION

University Athletics for men are under the entire control of the University of Toronto Athletic Association, of which the executive body is the Athletic Directorate. This consists of:

The President of the University,  
Two members of the faculty, appointed by the President,  
Two graduates, appointed by the Athletic Advisory Board,  
The Medical Director and the Financial Secretary (*ex officio*),  
Five undergraduates, elected annually,  
An undergraduate representative, appointed by the Executive of  
the Students' Administrative Council.

The Directorate alone has the power to sanction the use of the name "The University of Toronto" in connection with men's athletics, and no athletic event can be held in the University without its approval. It has control of the Athletic Field, the Gymnasium, the Swimming Pool, and other conveniences in connection with Athletics in Hart House, and is empowered by the Board of Governors to make the necessary arrangements to effect the carrying out of the University regulations requiring Physical Training for men.



## THE GRADUATING DEPARTMENTS

The instruction in the various departments leading through the four years to the degrees of B.A.Sc. and B.Arch. is designed to give the student a thorough grounding in the fundamentals of the engineering and architectural professions, and in addition a sufficient familiarity with applications of the principles to make him immediately useful upon graduation.

With the exception of Architecture and Chemical Engineering the various courses are very similar in the first year. The succeeding years are devoted to the more particular work of the departments. In the fourth year specialization develops to the extent of various options.

The graduating courses are so designed, with many subjects common to the departments of the several years, that the student upon graduation will find himself sufficiently equipped in the various fundamentals to pursue readily his studies in branches other than the one in which he has graduated and indeed to be useful in them as well. The courses in this Faculty are not planned to make specialists; the process of specialization is more properly deferred until after graduation.

In the teaching of the fundamentals, instruction is not confined wholly to applied science. As the future engineer is vitally concerned with the development of the country, it is essential that he be instructed as well in certain fundamentals in economics, administration and business which, in conjunction with his scientific training, will enable him to develop his full value.

In some departments laboratory work in the fourth year consists of an investigation of some specific problem. In all cases the student's knowledge of the original literature and primary sources of information is extended, and he is given a very desirable and useful training in methods of research. In this way the undergraduate course is linked with the graduate course (see p. 111) and with the work of the School of Engineering Research (see p. 110).

On the following pages the courses of instruction in the different departments are set forth in detail. The time devoted to lectures and practical work is indicated as accurately as possible, but is subject to modification from time to time as occasion may require.

For further information concerning the opportunities available for graduates of this Faculty, reference should be made to the pamphlet issued by the Director of Extension Work and Publicity of the University entitled "Opportunities for Graduates in Applied Science."

## 1. DEPARTMENT OF CIVIL ENGINEERING

The course in Civil Engineering is designed to meet the needs of the students who intend to take up such work as Geodetic Surveying, Railway Engineering, Municipal Engineering, Sanitary Engineering, Highway Engineering, Structural Engineering, Hydraulic Engineering, and administrative work in connection with both Engineering and Industrial undertakings.

## FIRST YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Calculus.....	236	2	0	2	0
Analytical Geometry.....	238	1	0	2	0
Descriptive Geometry.....	160	1	0	1	0
Surveying.....	270, 271	1	6	1	0
Statics.....	1	2	0	2	0
Dynamics.....	2	2	0	2	0
General Chemistry.....	85	2	0	1	0
Electricity.....	135	2	0	2	0
Geometrical Optics.....	185 (b)	1	2	1	2
Technical English.....	122 (a)	1	0	1	0
Business.....	121	0	0	1	0
Engineering Drawing.....	166	0	11	0	18
Physical Training.....	269	0	2	0	2

## SECOND YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Vacation Work.....	184	...	..	..	..
Calculus.....	237	1	1	1	1
Spherical Trigonometry.....	239	1	0	0	0
Elementary Astronomy.....	71	1	0	1	0
Descriptive Geometry.....	162	1	0	1	0
Surveying.....	272, 273	1	9	1	0
Dynamics.....	3	1	0	1	0

CIVIL ENGINEERING—SECOND YEAR—Cont.

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Mechanics of Materials.....	4	2	0	2	0
Engineering Chemistry.....	93	1	0	0	0
Inorganic Chemistry.....	87A	1	0	0	0
Organic Chemistry.....	95	0	0	1	0
Metallurgy.....	241	0	0	1	0
Geology.....	195	0	0	2	0
Mineralogy.....	257, 259	2	1	0	2
Hydrostatics.....	186	0	0	1	1
Heat.....	187	1	1½	0	0
Photography.....	188	1	1½	0	1½
Economics & Finance.....	123	1	0	1	0
Chemical Laboratory.....	89	0	0	0	6
Engineering Drawing.....	169	0	4½	0	13½
Physical Training.....	269	0	2	0	2

THIRD YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Survey Camp.....	275	...	...	...	...
Engineering Chemistry....	102	1	0	1	0
Theory of Structures.....	6	2	0	2	0
Thermodynamics.....	223, 224	1	0	1	2
Hydraulics.....	205, 206	2	0	2	3
Least Squares.....	240	0	0	1	0
Practical Astronomy and Geodesy.....	72, 73	2	2	2	0
Descriptive Geometry.....	164	1	0	0	0
Surveying and Levelling...	274	1	0	1	0
Electricity.....	143, 144(a)	1	3	1	0
Stress Graphics.....	10	1	0	1	0
Cements and Concrete....	11	0	0	1	0
Engineering Geology.....	197	1	0	1	0
Commercial Law.....	124	1	0	1	0
Public Speaking.....	133	1	0	0	0
Mechanics of Materials Laboratory.....	9	0	3	0	0
Engineering Drawing.....	173	0	15	0	12

## CIVIL ENGINEERING—FOURTH YEAR

## (a) Astronomy Option

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Survey Camp.....	275	..	..	..	..
Thesis.....	285	0	3	0	0
Engineering Economics..	125	0	0	1	0
Engineering Law.....	126	1	0	0	0
Contracts and Specifications.....	127	0	0	1	0
Management.....	128	1	0	0	0
Astronomy.....	74, 76	2	23	2	0
Geodesy.....	75, 76	2	0	2	23
Photographic Surveying.	191 (b)	1	2	0	0

## FOURTH YEAR

## (b) Municipal Engineering Option

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Thesis.....	285	0	3	0	0
Engineering Economics..	125	0	0	1	0
Engineering Law.....	126	1	0	0	0
Contracts and Specifications.....	127	0	0	1	0
Management.....	128	1	0	0	0
Reinforced Concrete....	15	1	0	1	0
Foundations.....	14	1	0	1	0
Hydraulics.....	211	1	3	0	0
Structural Design.....	17	1	0	0	0
Structural Design Drawing.....	179	0	0	0	5
Miscellaneous Structures	19	0	0	1	0
Hygiene and Bacteriology.....	82	1	0	1	6
Biology.....	81	0	5	0	0
Sanitary Chemistry....	117	1	6	0	4
Sanitary Engineering...	280	1	3	1	6
Highway Engineering...	281	1	3	1	3
Municipal Seminar (including Town Planning).....	282	0	3	0	3
Municipal Administration (including Civics)	132	1	0	1	0

CIVIL ENGINEERING—FOURTH YEAR—(c) Structural Engineering Option

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Thesis.....	285	0	3	0	0
Engineering Economics..	125	0	0	1	0
Engineering Law.....	126	1	0	0	0
Contracts and Specifications.....	127	0	0	1	0
Management.....	128	1	0	0	0
Reinforced Concrete....	15	1	0	1	0
Foundations.....	14	1	0	1	0
Theory of Structures....	12	2	0	2	0
Physical Metallurgy....	252	1	0	1	0
Structural Design.....	17, 18	2	0	1	0
Miscellaneous Structures	19	0	0	1	0
Mechanics of Materials Laboratory.....	13	0	3	0	6
Structural Design Drawing.....	178	0	22	0	22

FOURTH YEAR—(d) Hydraulic Engineering Option

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Thesis.....	285	0	3	0	0
Engineering Economics..	125	0	0	1	0
Engineering Law.....	126	1	0	0	0
Contracts and Specifications.....	127	0	0	1	0
Management.....	128	1	0	0	0
Reinforced Concrete....	15	1	0	1	0
Foundations.....	14	1	0	1	0
Theory of Structures....	12	2	0	2	0
Hydraulics.....	207, 208, 209	3	10	3	10
Physical Metallurgy....	252	1	0	1	0
Structural Design.....	17, 18	2	0	1	0
Miscellaneous Structures	19	0	0	1	0
Electrical Laboratory... Mechanics of Materials Laboratory.....	144 (a)	0	0	0	3
Structural Design Drawing.....	179	0	4	0	8

## CIVIL ENGINEERING—FOURTH YEAR

## (e) Railway Engineering Option

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Thesis.....	285	0	3	0	0
Engineering Economics..	125	0	0	1	0
Engineering Law.....	126	1	0	0	0
Contracts and Specifications.....	127	0	0	1	0
Management.....	128	1	0	0	0
Reinforced Concrete....	15	1	0	1	0
Foundations.....	14	1	0	1	0
Theory of Structures....	12	2	0	2	0
Hydraulics.....	211	1	3	0	0
Special Geology.....	204	0	0	1	1½*
Physical Metallurgy....	252	1	0	1	0
Electrical Laboratory. .	144 (a)	0	0	0	3
Motive Power.....	225	1	0	1	0
Railway and Miscellaneous Structures.....	20, 19	1	0	1	0
Railway Economics....	131	2	0	2	0
Railway Location and Design.....	276	1	8	1	8
Mechanics of Materials Laboratory.....	13	0	3	0	6
Structural Design Drawing.....	179	0	6	0	6

\*The ½ hour represents two excursions during the term.

## 2. DEPARTMENT OF MINING ENGINEERING

The course in Mining Engineering, which originated in 1878 as a course in Assaying and Mining Geology, is intended to serve as a preliminary training for those who expect to practice in some branch of Mining Engineering, such as exploration of mining areas and primary development, mine surveying, mining processes involving civil, mechanical, and electric work of underground workings, mining machinery and operation; milling and treatment of ores, assaying and other forms of analysis and research, and administrative work in connection with both Engineering and Industrial undertakings.

## FIRST YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Calculus.....	236	2	0	2	0
Analytical Geometry.....	238	1	0	2	0
Descriptive Geometry.....	160	1	0	1	0
Surveying.....	270, 271	1	6	1	0
Statics.....	1	2	0	2	0
Dynamics.....	2	2	0	2	0
General Chemistry.....	85	2	0	1	0
Electricity.....	135	2	0	2	0
Mineralogy.....	255, 258	2	1	0	3
Technical English.....	122 (a)	1	0	1	0
Business.....	121	0	0	1	0
Mining Laboratory.....	50	0	0	0	3
Engineering Drawing.....	166	0	11	0	18
Physical Training.....	269	0	2	0	2

## MINING ENGINEERING—SECOND YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Vacation Work.....	181	..	..	..	..
or Vacation Work.....	68	..	..	..	..
Descriptive Geometry....	162	1	0	1	0
Surveying.....	272, 273	1	6	1	0
Dynamics.....	3	1	0	1	0
Mechanics of Materials....	4	2	0	2	0
Inorganic Chemistry.....	87A	1	0	0	0
Inorganic Chemistry.....	87B	0	0	1	0
Organic Chemistry.....	95	0	0	1	0
Metallurgy.....	241	0	0	1	0
Geology.....	195	0	0	2	0
Mineralogy.....	260, 261	1	2	1	2
Mining.....	51, 53	1	3	0	0
Theory of Measurements..	65	1	0	0	0
Steam Engines.....	216	1	0	0	0
Machine Design.....	234	1	0	1	3
Economics and Finance....	123	1	0	1	0
Chemical Laboratory.....	80, 90	0	6	0	6
Engineering Drawing.....	169	0	3	0	12
Physical Training.....	260	0	2	0	2

## THIRD YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Vacation Work.....	69	..	..	..	..
Survey Camp.....	275	..	..	..	..
Geological Field Work....	193	..	..	..	..
Engineering Chemistry....	102	1	0	1	0
Theory of Structures.....	7	2	0	0	0
Hydraulics.....	205, 206	2	0	2	3
Analytical Chemistry.....	88	1	0	1	0
Electricity.....	143	1	0	1	0
Assaying.....	45, 46	1	3	0	3
Economic Geology.....	202, 203	1	0	3	2
Dynamic and Structural Geology.....	198	1	0	0	0
Ore Dressing.....	58, 59	1	3	1	3
Physics of Ore Dressing...	64	1	0	1	0
Mining.....	54	1	0	1	0
Petrography.....	262	1	0	1	0
Metallurgy.....	243	1	0	1	0



## MINING ENGINEERING—THIRD YEAR—Cont.

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Physical Metallurgy.....	244	0	0	2	0
Commercial Law.....	124	1	0	1	0
Petrography Laboratory ..	263	0	2	0	2
Introductory Research.....	66	0	0	0	3
Chemical Laboratory.....	99	0	0	0	9
Hydraulics Laboratory....	210	0	0	0	3
Engineering Drawing.....	174	0	9	0	0

## FOURTH YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Vacation Work.....	70	..	..	..	..
Thesis.....	67	0	7	0	10
Mine Cost Keeping and Management.....	56	1	0	1	0
Thermodynamics.....	223	1	0	1	0
Assaying.....	47, 48	0	0	1	3
Electrochemistry.....	107, 108	2	3	0	0
Geology, Pleistocene and Physiographic.....	194, 201	1	1	0	0
Geology, Precambrian.....	199	2	0	0	0
Geology, Mining.....	200	0	0	2	0
Metallurgy.....	247	1	0	1	6
Mining.....	55	1	0	1	0
Ore Dressing.....	60, 61	1	6	1	0
Engineering Economics...	125	0	0	1	0
Metallography.....	251	0	0	0	3
Electrical Laboratory....	144 (b)	0	3	0	0
Mechanics of Materials Laboratory.....	9	0	0	0	3
Thermodynamics Lab'y...	224	0	3	0	0

## 3. DEPARTMENT OF MECHANICAL ENGINEERING

The course in Mechanical Engineering is intended to serve as a preliminary training for those who intend to take up work connected with the design, manufacture, installation, or operation of machinery for the use of power as generated by steam, gas, oil, and water, and machinery and methods for the production, transportation, and handling of material, heating, ventilation, refrigeration, compressing of air, pumping of water, and all problems of a mechanical nature, and administrative work in connection with both Engineering and Industrial undertakings.

## FIRST YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Calculus.....	236	2	0	2	0
Analytical Geometry....	238	1	0	2	0
Descriptive Geometry...	160	1	0	1	0
Surveying.....	270, 271	1	6	1	0
Statics.....	1	2	0	2	0
Dynamics.....	2	2	0	2	0
General Chemistry.....	85	2	0	1	0
Electricity.....	135	2	0	2	0
Illuminating Engineering	185 (a)	1	2	1	2
Technical English.....	122 (a)	1	0	1	0
Business.....	121	0	0	1	0
Engineering Drawing...	166	0	11	0	18
Physical Training.....	269	0	2	0	2

## MECHANICAL ENGINEERING—SECOND YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Vacation Work.....	184	0	0	0	0
Calculus.....	237	1	1	1	1
Descriptive Geometry...	162	1	0	1	0
Dynamics.....	3	1	0	1	0
Mechanics of Materials..	4, 9	2	0	2	3
Engineering Chemistry..	93	1	0	0	0
Inorganic Chemistry....	87A	1	0	0	0
Organic Chemistry.....	95	0	0	1	0
Metallurgy.....	241	0	0	1	0
Hydrostatics.....	186	0	0	1	0
Elementary Machine Design.....	232	1	0	1	0
Electricity.....	136, 137	2	3	2	5
Steam Engines.....	216	1	0	1	0
Theory of Mechanism...	230	2	1½	2	1½
Compound Stress.....	10a	1	0	0	0
Economics and Finance..	123	1	0	1	0
Chemical Laboratory....	89	0	0	0	6
Engineering Drawing....	170	0	15	0	7½
Physical Training.....	269	0	2	0	2

## THIRD YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Engineering Chemistry..	102	1	0	1	0
Theory of Structures....	7	2	0	0	0
Thermodynamics.....	217, 219	2	3	2	3
Hydraulics.....	205, 206	2	0	2	3
Heat Engines.....	218	2	0	2	0
Mechanics of Machinery.	231	1	0	1	0
Machine Design.....	233	2	4	2	10
Magnetism & Electricity	138, 140	1	3	1	4½
Alternating Current....	139	1	0	1	0
Physical Metallurgy....	244	0	0	2	0
Engineering Drawing....	177	0	9	0	0

## MECHANICAL ENGINEERING—FOURTH YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Thesis.....	285	0	1	0	1
Engineering Economics	125	0	0	1	0
Structural Design.....	17, 18, 180	2	3	0	0
Heat Treatment of Iron and Steel.....	253	1	0	1	0
Industrial Management.	130	1	0	1	0
Reinforced Concrete....	15	1	0	0	0
Machine Design.....	235	2	7	2	7
Thermodynamics.....	220, 221, 222	3	7	3	8
Hydraulics.....	207, 208, 209	3	7	3	8

## 4. DEPARTMENT OF ARCHITECTURE

The instruction in this department is arranged mainly to lay a broad foundation for the subsequent professional life of its graduates. The curriculum is based on the belief that an architect should have an education in liberal studies, that he should understand and appreciate the other arts in their relation to architecture, and that his training in design should teach him to regard building construction as an expression of his art rather than as an end in itself. With this object in view, the course in Architecture, which was originally derived from the Engineering courses, has been gradually broadened out to include an elementary training in the sister arts of painting and sculpture, and also courses in French and English.

## FIRST YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Studio	Lect.	Studio
Calculus.....	236	2	0	2	0
Analytical Geometry....	238	1	0	2	0
Descriptive Geometry...	161	1	0	1	0
Statics.....	1	2	0	2	0
Building Measurements..	37	1	2	1	0
Elements of Architec- tural Form.....	28	1	0	1	0
History of Architecture..	25	1	3	1	0
Technical English.....	122(a)	1	0	1	0
French.....	266	2	0	2	0
Modelling.....	36	0	2	0	2
Freehand Drawing and Water Colour Painting	35	0	3	0	3
Architectural Design....	31}	0	14	0	18
Engineering Drawing... ..	167}				
Physical Training.....	269	0	2	0	2

## ARCHITECTURE—SECOND YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Studio	Lect.	Studio
Vacation Work.....	184	..	..	..	..
Descriptive Geometry...	163	1	0	1	0
Mechanics of Materials..	5	2	0	2	0
Theory of Architectural Planning.....	32	1	0	1	0
History of Architecture..	25(a)	1	0	1	0
History of Ornament....	29	1	0	1	0
Illumination.....	189	1	1½	1	1½
Economics and Finance..	123	1	0	1	0
Technical English.....	122(b)	1	0	1	0
French.....	266	2	0	2	0
Modelling.....	36(a)	0	2	0	2
Freehand Drawing.....	35(a)	0	3	0	3
Architectural Design....	31(a)	0	17	0	17
Engineering Drawing...	171				
Physical Training.....	269				

## THIRD YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Studio	Lect.	Studio
Vacation Work.....	41	..	..	..	..
Structural Design.....	8	2	0	2	0
Acoustics.....	190	1	1½	1	0
Building Materials.....	38	2	0	2	0
History of Architecture..	25(b)	1	0	1	0
History of Fine Art....	30	1	0	1	0
Architectural Composition.....	33	1	0	1	0
Garden Design.....	27	0	0	1	0
Commercial Law.....	124	1	0	1	0
French.....	266	1	0	1	0
Modelling.....	36(b)	0	2	0	2
Freehand Drawing and Water Colour Painting	35(b)	0	3	0	3
Architectural Design....	31(b)	0	18	0	18
Engineering Drawing...	175				

## ARCHITECTURE—FOURTH YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Studio	Lect.	Studio
Vacation Work.....	42	..	..	..	..
Thesis.....	286	0	3	0	3
Contracts and Specifications.....	127	0	0	1	0
Architectural Aspects of of Town Planning....	34	0	0	1	0
Advanced Architectural Programmes.....	26	1	0	1	0
Garden Design.....	27(a)	0	0	1	0
Structural Design.....	16	1	3	1	3
Heating and Ventilating.	40	1	0	1	0
Sanitary Science.....	39	1	0	1	0
Drawing from Life.....	35(c)	0	3	0	3
Modelling from Life.....	36(c)	0	2	0	2
AND ONE OF:					
Architectural Design..	31(c)	2	24	2	22
Architectural Engineer- ing .....	31(d), 16	4	22	3	20

## 6. DEPARTMENT OF CHEMICAL ENGINEERING

The course is designed to give the student a thorough training in Chemistry and its application to industry, as well as a general knowledge of the elements of thermodynamics, hydraulics, machine design, structural design, electricity and metallurgy. A preliminary training of this nature with subsequent practical experience will enable him to undertake the design and construction and also the operation and management of the plant required in such branches of chemical industry as are concerned with the production of chemical and pharmaceutical products, petroleum and its products, rubber goods, leather and glue, soap, meat products, food-stuffs, vegetable and animal oils, sugar, pulp and paper, illuminating gas, coal tar and wood distillates, paints and varnishes, explosives, dyes, glass, portland cement, metals and their alloys, electrochemical products, fermentation products, printers' inks, fertilizers, ceramic and building materials, etc.

## FIRST YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Calculus.....	236	2	0	2	0
Analytical Geometry.....	238	1	0	2	0
Descriptive Geometry.....	160	1	0	1	0
Statics.....	1	2	0	2	0
Dynamics.....	2	2	0	2	0
General Chemistry.....	85	2	0	1	0
Electricity.....	135	2	0	2	0
Geometrical Optics.....	185(b)	1	2	1	2
Technical English.....	122(a)	1	0	1	0
German.....	267	2	0	2	0
Business.....	121	0	0	1	0
Mineralogy Laboratory....	256	0	2	0	1
Biological Laboratory.....	80	0	6	0	0
Chemical Laboratory.....	86	0	0	0	12
Engineering Drawing.....	168	0	8	0	0
Physical Training.....	269	0	2	0	2



## CHEMICAL ENGINEERING—SECOND YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Vacation Work.....	184				
Calculus.....	237	1	1	1	1
Mechanics of Materials....	4	2	0	2	0
Engineering Chemistry....	93	1	0	0	0
Organic Chemistry.....	96	2	0	2	0
Metallurgy.....	241	0	0	1	0
Hydrostatics.....	186	0	0	1	1
Elementary Machine Design.....	232	1	0	1	0
Electricity.....	136, 137	2	3	2	3
Industrial Chemistry.....	94	1	0	1	0
Physical Chemistry.....	98	2	0	2	0
Inorganic Chemistry.....	87A	1	0	0	0
Inorganic Chemistry.....	87B	0	0	1	0
German.....	267	1	0	1	0
Economics and Finance....	123	1	0	1	0
Chemical Laboratory.....	92, 97	0	10	0	12
Engineering Drawing.....	172	0	7	0	3
Physical Training.....	269	0	2	0	2

## THIRD YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Engineering Chemistry....	102	1	0	1	0
Theory of Structures.....	7	2	0	0	0
Thermodynamics.....	217, 224	2	0	2	2
Hydraulics.....	205, 206	2	0	2	1
Metallurgy.....	243	1	0	1	0
Physical Metallurgy.....	244	0	0	2	0
Assaying Laboratory.....	49	0	3	0	0
Analytical Chemistry.....	88	1	0	1	0
Electrochemistry.....	107, 108	2	3	0	0
Industrial Chemistry.....	103	1	0	1	0
Organic Chemistry.....	105	2	0	2	0
Chemical Plant.....	104	1	0	1	0
German.....	267	1	0	1	0
Commercial Law.....	124	1	0	1	0
Chemical Laboratory.....	100, 106	0	7	0	17
Engineering Drawing.....	177	0	6	0	6
Electrical Laboratory.....	144 (c)	0	0	0	3

## CHEMICAL ENGINEERING—FOURTH YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Thesis.....	285				
Industrial Management...	130	1	0	1	0
Machine Design.....	234	1	0	1	3
German.....	267	1	0	1	0
or Spanish.....	268	1	0	1	0
Inorganic Chemistry.....	109	2	0	2	0
Organic Chemistry.....	110, 111	1	17	1	0
AND ONE OF:					
Electrochemistry.....	114, 115	2	*	2	*
Industrial Chemistry....	112, 113	1	*	1	*
Sanitary and Forensic Chemistry and Bac- teriology.....	116	1	*	1	*
(Metallurgy.....		1	*	1	*
Physical Metallurgy....	250	1	*	1	*
Ore Dressing.....	62, 63	1	0	1	6
Zymology.....	283	*	*	*	*

\*All time not otherwise allotted must be spent in the various laboratories in the proportions assigned by the Department.

## 7 DEPARTMENT OF ELECTRICAL ENGINEERING

The course in electrical engineering is designed for those who are looking forward to work in connection with the design, manufacture, installation, or operation of electrical machinery and equipment for the generation, transmission, and utilization of power, for domestic and industrial purposes including its many applications to problems of intercommunication in connection with railway, telephone, telegraph, or radio equipment, to work in connection with electrochemical processes, and to administrative work in connection with both engineering and industrial undertakings.

## FIRST YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Calculus.....	236	2	0	2	0
Analytical Geometry.....	238	1	0	2	0
Descriptive Geometry.....	160	1	0	1	0
Surveying.....	270, 271	1	6	1	0
Statics.....	1	2	0	2	0
Dynamics.....	2	2	0	2	0
General Chemistry.....	85	2	0	1	0
Electricity.....	185	2	0	2	0
Illuminating Engineering..	185 (a)	1	2	1	2
Technical English.....	122 (a)	1	0	1	0
Business.....	121	0	0	1	0
Engineering Drawing.....	166	0	11	0	18
Physical Training.....	269	0	2	0	2

## ELECTRICAL ENGINEERING—SECOND YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Vacation Work.....	184				
Calculus.....	237	1	1	1	1
Descriptive Geometry....	162	1	0	1	0
Dynamics.....	3	1	0	1	0
Mechanics of Materials....	4	2	0	2	0
Engineering Chemistry....	93	1	0	0	0
Organic Chemistry.....	95	0	0	1	0
Inorganic Chemistry.....	87A	1	0	0	0
Hydrostatics.....	185	0	0	1	1½
Elementary Machine Design.....	232	1	0	1	0
Electricity.....	136, 137	2	3	2	3
Steam Engines.....	216	1	0	1	0
Theory of Mechanism....	230	2	1½	2	1½
Economics and Finance....	123	1	0	1	0
Chemical Laboratory.....	89	0	6	0	0
Engineering Drawing.....	170	0	12	0	12
Physical Training.....	269	0	2	0	2

## THIRD YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Engineering Chemistry..	102	1	0	1	0
Thermodynamics.....	217, 219	2	3	2	1
Hydraulics.....	205, 206	2	0	2	1
Heat Engines.....	218	1	0	1	0
Mechanics of Machinery.	231	1	0	1	0
Machine Design.....	233	2	4½	2	4½
Alternating Current....	139	1	0	2	0
Physical Metallurgy....	244	0	0	2	0
Electrochemistry.....	107, 108	2	3	0	0
Magnetism and Electricity.....	138	2	0	1	0
Electrical Design.....	141, 142	1	3	1	3
Commercial Law.....	124	1	0	1	0
Electrical Laboratory....	140	0	6	0	6

## ELECTRICAL ENGINEERING—FOURTH YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Thesis.....	285				
Engineering Economics..	125	0	0	1	0
Industrial Management..	130	1	0	1	0
Applied Electricity.....	145, 146	4	20	4	19
AND ONE OF:					
Hydraulics.....	207, 208, 209	3	9	3	10
Thermodynamics.....	220, 221, 222	3	9	3	9
Electrochemistry.....	114, 115	2	9	2	9
Illumination Design..	192	2	9	2	9
Radiotelegraphy.....	147, 148	2	9	2	9
and					
Acoustics.....	191(a)	1	1	0	0

## 8. DEPARTMENT OF METALLURGICAL ENGINEERING

This course is designed for those who intend to take up work in connection with the production, treatment and working of metals for the purposes of industry; or the design, construction, or operation of metallurgical plants including smelters, furnaces, foundries, refineries, and lixiviation works; and administrative work in connection with both Engineering and Industrial undertakings.

An optional course in this Department is provided in the Third and Fourth years for those students who wish to become Ceramic Engineers. Ceramic plant experience, approved by the Department, will be necessary before the student will be given his degree. Students who have successfully completed their first and second years in any department of engineering will be allowed to transfer to the Department of Metallurgical Engineering for pursuing this option.

## FIRST YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Calculus.....	236	2	0	2	0
Analytical Geometry....	238	1	0	2	0
Descriptive Geometry...	160	1	0	1	0
Surveying.....	270, 271	1	6	1	0
Statics.....	1	2	0	2	0
Dynamics.....	2	2	0	2	0
General Chemistry.....	85	2	0	1	0
Electricity.....	135	2	0	2	0
Technical English.....	122(a)	1	0	1	0
Business.....	121	0	0	1	0
Mineralogy Laboratory..	256	0	2	0	1
Engineering Drawing....	166	0	11	0	18
Physical Training.....	269	0	2	0	2

## METALLURGICAL ENGINEERING—SECOND YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Dynamics.....	3	1	0	1	0
Mechanics of Materials..	4	2	0	2	0
Chemistry.....	87A, 87B, 91	1	14	1	13
Metallurgy.....	241, 242	1	0	2	0
Geology and Ore Deposits.....	196	1	1	1	1
Steam Engines.....	216	1	0	0	0
Electricity.....	136, 137	2	3	2	3
Spanish.....	268	1	0	1	0
Economics and Finance..	123	1	0	1	0
Engineering Drawing....	172	0	3	0	6
Physical Training.....	269	0	2	0	2

## THIRD YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Engineering Chemistry..	102	1	0	1	0
Cements and Concrete...	11	0	0	1	0
Heat Engines.....	218	1	0	1	0
Electricity.....	143, 144 (d)	1	3	1	3
Electrochemistry.....	107, 108	2	3	0	0
Assaying.....	45, 46	1	3	0	3
Ore Dressing.....	58, 59	1	3	1	3
Mining.....	51, 52	1	0	1	0
Metallurgy.....	245	2	3	1	6
Physical Metallurgy....	246	1	3	1	0
Machine Design.....	234	1	0	1	3
Commercial Law.....	124	1	0	1	0
Chemical Laboratory...	101	0	0	0	6
Engineering Drawing....	182	0	3	0	0
Analytical Chemistry....	88	1	0	1	0

## METALLURGICAL ENGINEERING—THIRD YEAR

## (a) Ceramic Option

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Engineering Chemistry..	102	1	0	1	0
Physical Chemistry....	98	2	0	2	0
Engineering Geology....	197	1	0	1	0
Theory of Structures....	7	2	0	0	0
Cements and Concrete..	11	0	0	1	0
Commercial Law.....	124	1	0	1	0
Engineering Drawing...	177	0	6	0	6
Thermodynamics.....	223, 224	1	0	1	2
Machine Design.....	234	1	0	1	0
Mineralogy.....	255, 258	2	1	0	0
Petrography.....	260	1	0	1	0
Ceramics (General and Manufacturing).....	254(a)	4	0	2	0
Glazes.....	254(b)	0	0	2	0
Ceramic Calculations...	254(c)	0	0	1	0
Ceramic Laboratory....	254(d)	0	6	0	6
Clay Testing.....	254(e)	0	6	0	6

## FOURTH YEAR

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Thesis.....	285	0	6	0	6
Engineering Economics..	125	0	0	1	0
Contracts and Specifica- tions.....	127	0	0	1	0
Plant Management.....	129	0	0	1	0
Thermodynamics.....	223	1	0	1	0
Assaying.....	47, 48	0	0	1	3
Ore Dressing.....	60, 61	1	6	1	0
Electrochemistry.....	114, 115	2	3	2	3
Metallurgy.....	249	1	0	1	0
Metallurgy Problems...	248	2	4	2	4
Physical Metallurgy....	250	1	3	1	3
Thermodynamic Labor- atory.....	224	0	3	0	0
Hydraulic Laboratory...	210	0	0	0	3



## METALLURGICAL ENGINEERING—FOURTH YEAR

## (a) Ceramic Option

Subject	No.	Hours per week			
		First Term		Second Term	
		Lect.	Lab'y	Lect.	Lab'y
Contracts and Specifications.....	127	0	0	1	0
Plant Management.....	129	0	0	1	0
Reinforced Concrete....	15	1	0	1	0
Structural Design.....	18	1	0	0	0
Silicate Chemistry.....	116(a)	0	0	2	0
Pleistocene Geology....	194, 201	1	3	1	0
Petrography.....	262, 263	1	2	1	2
Structural Design Drawing.....	183	0	6	0	6
Refractories and Ceramic bodies.....	254(f)	2	0	0	0
Glass and enameled iron	254(g)	0	0	2	0
Ceramic products and specifications.....	254(h)	1	0	0	0
Ceramic Laboratory....	254(i)	0	9	0	9
Thesis.....	285	0	10	0	10

### OUTLINE OF LECTURE AND LABORATORY COURSES PROCEEDING TO BACHELOR DEGREES

On the following pages the courses of instruction are set forth in detail. The time devoted to the various subjects, both for lectures and practical work, is indicated as accurately as possible; the hours, however, shown in the prescriptive schedules on pages 508 to 531 will govern.

The curriculum as printed is intended to cover the prescription for the current year only and does not imply the right of a student to have the course unchanged during any subsequent year of his attendance.

The courses are designed to give the student a sound training in the fundamental scientific principles on which the various branches of engineering are based. The instruction is given by means of lectures and practical work in the laboratories, the drafting rooms and the field.

The courses in the first two years are devoted to the theoretical and essential scientific requirements of the engineering profession as a whole, with an introduction in a few cases of the practical application of these to engineering problems.

In the third and fourth years, the subjects of the former years are continued with particular attention paid to their application to modern engineering practice in the problems of design, erection, installation and operation peculiar to the several branches of the profession.

## APPLIED MECHANICS

1. *Statics*:—T. R. Loudon.

All Departments, I Year; 2 hours per week, both terms.

This course of lectures deals with forces in a single plane, and concerns chiefly the calculation of tension, compression and shearing stresses in frame structures and solid beams.

2. *Dynamics*:—T. R. Loudon.

Departments 1, 2, 3, 6, 7, 8, I Year; 2 hours per week; both terms.

This course of lectures deals with bodies having motion of translation in one plane; also with relative motion, momentum, work and energy.

Text Book:—Tutorial Dynamics—Briggs and Bryan.

3. *Dynamics of Rotation*:—W. J. Loudon.

Departments 1, 2, 3, 7, 8, II Year; 1 hour per week; both terms.

This course covers angular motion, including moments of inertia, simple harmonic motion, the pendulum, centres of mass, suspension and percussion, the simple theory of the fly-wheel and the governor.

Text Book:—Dynamics of Rotation—Loudon.

4. *Mechanics of Materials*:—P. Gillespie.

Departments 1, 2, 3, 6, 7, 8, II Year; 2 hours per week; both terms.

In this course the strength and elasticity of materials are mathematically treated. The stresses in such elements of structures as the tie rod, the beam, the strut and the member subjected to shear are investigated and the elementary principles of design established. In the lecture and drafting rooms through numerous problems involving the design of simple beams, columns, riveted connections, etc., these principles are exemplified. The work includes also the discussion of eccentric loading, suddenly applied loads and repeated stresses.

Reference Book:—Mechanics of Materials—Merriman.

5. *Mechanics of Materials*:—T. R. Loudon.

Department 4, II Year; 2 hours per week; both terms.

This course deals with the mathematical consideration of stress and elasticity. Among the problems taken up are the consideration of riveted joints, theory of simple and continuous beams, the theory of columns and simple column footings.

Text:—Strength of Materials—Boyd.

6. *Theory of Structures*:—C. R. Young.

Department 1, III Year; 2 hours per week; both terms.

The work of the first term comprises a thorough discussion of combined stresses, columns, restrained, continuous and trussed beams, multiple section and box girders, and plate girders. A number of designs of structures and structural details are worked out in the class and drafting rooms.

The second term is given chiefly to the design of a riveted truss highway span and a riveted truss railway span, the complete designs being made in the lecture and drafting rooms.

**Text Books**:—Modern Framed Structures, Part III—Johnson, Bryan and Turneaure; Structural Members and Connections—Hool and Kinne; Structural Problems—Young; Carnegie Pocket Companion; Cambria Steel.

7. *Theory of Structures*:—C. R. Young.

Departments 2, 3, 6 and 8(a), III Year; 2 hours per week; first term.

The work is practically the same as that for Department I in the first term.

8. *Structural Design*:—T. R. Loudon, W. J. T. Wright.

Department 4, III Year; 2 hours per week; both terms.

During the first term, the economics of the design of floor systems in timber and structural steel are discussed. The design of masonry piers, structural steel and timber columns is also gone into in the first term.

The second term is taken up in the discussion of the design of roof trusses and an introduction to reinforced concrete.

9. *Mechanics of Materials*:—P. Gillespie.

Department 1, III Year; Department 3, II Year; Department 2, IV Year; 3 hours per week; one term.

This laboratory course is intended to give the student an introduction to the experimental study of the strength and elasticity of materials. It is intended that he shall acquire some familiarity with the construction and operation of testing machines and with the properties of ordinary materials of construction.

**Reference**:—Laboratory Instruction Sheets, Department of Civil Engineering; Municipal and Structural.

10. *Stress Graphics*:—T. R. Loudon.

Department 1, III Year; one hour per week; both terms.

This course of lectures deals mainly with graphic methods of solving stresses in framed structures. The construction of Shearing Force diagrams, Bending Moment diagrams and Influence Lines is also dealt with.

**Text Book**:—Graphic Analysis—Wolfe.

10(a). *Compound Stress*:—T. R. Loudon.

Department 3, II Year; one hour per week, first term.

This course deals mainly with the discussion of methods determining the stress conditions in bodies subjected to compound stress. Both analytical and graphical methods of analysis are discussed.

11. *Cements and Concrete*:—P. Gillespie.

Departments, 1, 8, and 8 (a) III Year; one hour per week; second term.

The manufacture, testing and use of Portland cement and the fundamentals of the theory of reinforced concrete are discussed in this course of lectures.

12. *Theory of Structures*:—C. R. Young.

Departments 1 (c), (d), (e), IV Year; 2 hours per week; both terms.

The work comprised in this course of lectures concerns arches, suspension bridges, cantilever bridges, swing bridges, deflections, and secondary stresses. Problems based on the lectures are worked out in the drafting rooms.

Reference Books:—Modern Framed Structures, Part II—Johnson, Bryan and Turneure; Theory of Structures—Spofford.

13. *Mechanics of Materials*:—P. Gillespie.

Departments 1 (c), (d) and (e), IV Year; a laboratory course of 3 hours per week one term and 6 hours per week the other term.

This course of experiments is intended to give the student practice in investigating the elastic and physical properties of iron, steel, concrete, timber, etc., and in the use of instruments of precision designed for that purpose.

Reference Book:—Materials of Construction—Johnson.

14. *Foundations, Retaining Walls and Dams*:—P. Gillespie, W. J. Smither.

Department 1 (b), (c), (d) and (e), IV Year; 1 hour per week; both terms.

This course of lectures is devoted to the design of the structures mentioned. Preparatory to the discussion of the practical aspects of the subjects, and in order to gain familiarity with the fundamental principles involved, a part of the first term is given over to the consideration of the theory of compound stress. The most approved forms of construction of retaining walls, footings, abutments, piers and dams are then described, and typical designs are worked out in the class and drafting rooms.

Some attention is also given to the principles of formula charting.

Text Books and Books of Reference:—Retaining Walls for Earth—M. A. Howe; Walls, Bins and Grain Elevators—M. S. Ketchum; A Treatise on Masonry Construction—I. O. Baker; Design and Construction of Dams—E. Wegmann.

15. *Reinforced Concrete*:—P. Gillespie.

Department 1 (b), (c), (d) and (e); and Department 8 (a), IV Year;  
1 hour per week; both terms. Department 3, IV Year; 1 hour per  
week; first term.

The theory of the strength of reinforced concrete elements including  
the beam, the slab, the T-beam, the column and the footing, is  
continued in this course.

The analysis of the monolithic arch by the elastic theory is discussed,  
and the student is required in the drafting room to apply his  
knowledge to the design of simple structures.

Reference books:—Principles of Reinforced Concrete Construction—  
Turneaure and Maurer; Reinforced Concrete Construction, Vol.  
I—Hool.

16. *Structural Design*:—T. R. Loudon.

Department 4, IV Year; 1 hour lecture and 3 hours laboratory per  
week; both terms.

During this course of lectures, the economics of the design of build-  
ings in reinforced concrete and steel are discussed. This course  
of lectures is supplemented by the actual designing of buildings  
in the drafting room.

Text:—Principles of Reinforced Concrete—Turneaure and Maurer.

17. *Structural Design*:—C. R. Young, W. J. Smither.

Department 1<sub>a</sub>, 1<sub>d</sub>, IV Year; 1 hour per week; both terms.

Department 1<sub>b</sub> and 3, IV Year; 1 hour per week; first term.

This course of lectures is devoted to the problems connected  
with the structural design of buildings of timber, steel and  
reinforced concrete. The various structural elements such as  
the floors, columns, footings, walls and wind bracing, are fully  
discussed, and portions of typical buildings are designed in the  
class and drafting rooms.

Text Books:—Handbook of Building Construction—Hool and  
Johnson; Architects' and Builders' Handbook—Kidder—Nolan.

18. *Structural Design*:—C. R. Young, W. J. Smither.

Departments 1<sub>a</sub>, 1<sub>d</sub>, 3 and 8 (a), IV Year; 1 hour per week; first term.

Consideration is given in this course to the various types of mill  
buildings, to the conditions governing their choice and to the de-  
tails of construction in different materials. Designs of portions  
of mill buildings are worked out in the class and drafting rooms.

Text Books:—Steel Mill Buildings—Ketchum. Mill Buildings—  
Tyrell.

19. *Miscellaneous Structures*:—W. J. Smither.

Department 1 (b), (c), (d) and (e), IV Year; 1 hour per week; second  
term.

In this course of lectures the application of theoretical principles to the design of a variety of structures is made. Among those structures discussed are transmission line towers, elevated tanks and their supporting towers, standpipes, large pressure pipes, sewers, culverts, small highway bridges, sub-surface tanks and tall chimneys. Whenever possible the lecture work is followed up by designs in the drafting room.

**20. *Railway Structures*:—C. R. Young.**

Department 1, IV Year; 1 hour per week; first term.

A course of lectures with exercises covering alternative bridge layouts with comparative estimates of costs, temporary and permanent trestles, tunnels, tunnels vs. bridges, buildings, turntables, snow sheds and shelters.

### ARCHITECTURE

**25. *History of Architecture*:—H. H. Madill, E. R. Arthur.**

Department 4, I Year; 1 hour per week; both terms.

In this course the development of architecture is traced from Pre-historic times to the Early Romanesque.

**25a. *History of Architecture*:—H. H. Madill, E. R. Arthur.**

Department 4, II Year; 1 hour per week; both terms.

In this course the development of architecture is traced from the Romanesque Period to the present time.

**25b. *History of Architecture*:—H. H. Madill, E. R. Arthur.**

Department 4, III Year; 1 hour per week; both terms.

In this course the work of the Renaissance in Italy, France and England is taken in greater detail than was possible in the broad field covered in the previous year.

**26. *Advanced Architectural Programmes*:—H. H. Madill, E. R. Arthur.**

Department 4, IV Year; 1 hour per week; both terms.

In this course of lectures the principles underlying the planning of such large buildings as Churches, Departmental Stores, Theatres, Schools, Railway Stations, etc., are discussed in detail.

**27. *Garden Design*:—H. B. Dunington-Grubb.**

Department 4, III Year.

In this course the historical development of Garden Design is traced from earliest times; the study of sites; the influence of topography, orientation, access, etc., on the problems of design; site planning; the location of buildings; the solution of an actual problem on a typical site.

**27a. *Garden Design*:—H. B. Dunington-Grubb.**

Department 4; IV Year.

The work of the previous year is continued and a problem is set in the studio involving principles of both architectural and garden design.

28. *Elements of Architectural Form*:—E. R. Arthur.  
Department 4, I Year; 1 hour per week; both terms.  
Lectures on the Five Orders of Architecture, their affiliated forms and other elements used in design. This course is preliminary to the lectures given in the II Year on the Theory of Architectural Planning.
29. *Architectural Ornament*:—H. H. Madill.  
Department 4, II Year; 1 hour per week; both terms.  
In this course the development of Ornament is traced from the beginning through Egyptian, Assyrian, Grecian, Roman, Byzantine, Romanesque, Gothic and Renaissance styles. An attempt is made to analyze ornament of the best periods and to systematize the principles followed in form and colour.
30. *History of Fine Art*:—C. W. Jefferys, F. Coates.  
Department 4, III Year; 1 hour per week; both terms.  
The course consists of an outline of the history and development of painting and of the minor pictorial arts from the earliest time until the present day; followed by an outline of the history and development of the different eras of sculpture ranging from the primitive to the present day.
31. *Architectural Design*:—H. H. Madill, E. R. Arthur.  
Department 4, I Year.  
This comprises work done in the Studio, including lettering, the drawing and rendering of the Orders and such elementary motives as a door, a window, etc.  
This is followed by a drawing in which the Classic orders and ornament taken from a particular building are arranged in the form of a composition, and by an elementary problem in design.
- 31a. *Architectural Design*:—H. H. Madill, E. R. Arthur.  
Department 4, II Year.  
This course is given by means of individual instruction in the studio and by criticisms of the solutions of different problems set during the year. It is in this course that the student begins the serious study of design; continued practice in architectural drawing and rendering affords the training necessary to make of the student a proficient draughtsman.
- 31b. *Architectural Design*:—H. H. Madill, E. R. Arthur.  
Department 4, III Year.  
This course is given by individual instruction in the studio and by criticisms of solutions of problems set during the year. The greater part of the course is devoted to problems in design and forms a continuation of the course given in the preceding year.

31c. *Architectural Design*.—H. H. Madill, E. R. Arthur.

Department 4, IV Year.

This course is a continuation of the work of the preceding years, being given by individual instruction in the studio and criticisms of the solution of problems set during the year.

During the second term architectural working drawings of a building designed by the student are prepared in the studio.

31d. *Architectural Design*.—T. R. Loudon, H. H. Madill, E. R. Arthur.

Department 4, IV Year; Architectural Engineering Option.

In this course the design and preparation of working drawings and structural details of work of a monumental character is carried on in the studio.

32. *Theory of Architectural Planning*.—E. R. Arthur.

Department 4, II Year.

In this course special attention is given to the elements and general principles of architectural planning.

33. *Architectural Composition*.—E. R. Arthur.

Department 4, III Year.

This course consists of a series of lectures on the theory of architectural design, the analysis of composition, proportion, scale, etc.

34. *Architectural Aspects of Town Planning*.—E. R. Arthur.

Department 4, IV Year; 1 hour per week; second term.

In this course of lectures the Historical Development of Town Planning is traced with particular reference to the Axial Planning of the Renaissance, Public Squares, the Grouping of Buildings and the placing of Monuments.

35. *Freehand Drawing and Water Colour Painting*.—C. W. Jefferys.

Department 4, I Year; 3 hours per week; both terms.

Drawing from still life objects. Primary free hand perspective.

Primary pencil, charcoal, and pen and ink rendering.

35a. Department 4, II Year; 3 hours per week; both terms.

Drawing and monochrome painting from still life.

Drawing from the cast.

Pencil, pen and ink, and monochrome rendering.

Primary water colour.

Drawing from landscape and natural objects.

35b. Department 4, III Year; 3 hours per week; both terms.

Drawing from the cast.

Water colour from still life. Water colour rendering.

Drawing from landscape and natural objects.

Students who are sufficiently advanced are admitted to the Fourth Year Life Drawing Class.



- 35c. Department 4, IV Year; 3 hours per week; both terms.  
Water colour from still life and from landscape.  
Drawing from life.  
Water colour rendering.
36. *Modelling*:—Frederick Coates.  
Department 4, I Year; 2 hours per week; both terms.  
The Orders. Synopsis of styles.
- 36a. Department 4, II Year; 2 hours per week; both terms.  
Problems in figures and in relation to architecture.
- 36b. Department 4, III Year; 2 hours per week; both terms.  
Styles continued.  
Problems, combination of figure, ornament and architecture and their relative values.
- 36c. Department 4, IV Year; 2 hours per week; both terms.  
Modelling from life.  
Anatomy.  
Composition of groups.
37. *Building Measurement*:—C. H. C. Wright.  
Department 4, I Year; 1 hour per week; both terms.  
In this course of lectures the principles of measurements and mensuration with special reference to buildings will be discussed. With this is combined practice in measurements of existing buildings, quantities, etc.
38. *Building Materials*:—C. H. C. Wright.  
Department 4, III Year; 2 hours per week; both terms.  
The structural and aesthetic value of the various building materials.
39. *Sanitary Science*:—H. H. Madill.  
Department 4, IV Year; 1 hour per week; both terms.  
Modern plumbing, its design and installation, drainage, sewerage disposal and water supply.
40. *Heating and Ventilating*:—C. H. C. Wright.  
Department 4, IV Year; 1 hour per week; both terms.  
The design of different systems, where they should be used, heating specifications, etc.
41. *Vacation Work*:—C. H. C. Wright, H. H. Madill, E. R. Arthur.  
Department 4, III Year.  
Each student is required to submit a set of rendered measured drawings of existing buildings or portions of buildings, the building first to be approved by the head of the Department, who will also decide the number and size of the drawings to be made. The record of measurements must be preserved in a notebook which will be submitted with the final drawings.

42. *Vacation Work*:—C. H. C. Wright, C. W. Jefferys.

Department 4, IV Year.

Each student is required to submit a set of at least six outdoor sketches in water colour, pen and ink, or pencil. The minimum size for each sheet will be 9"×12". Of these sketches at least two will be in water colour and three will be of an architectural character.

## ASSAYING, MINING AND ORE DRESSING

The work in Mining is directed more to the development of the proper attitude of mind towards mining problems than to the teaching of actual mining methods.

The teaching of Assaying has a two-fold function. The first is to give the student a working knowledge of the practice of the art, so that he can earn money as an assayer on graduation and use this as a stepping-stone to other positions. The second is to use the assaying laboratories for the training of the students in certain important phases of Engineering methods. The size of the apparatus, the completeness of the processes in short intervals of time, the extreme accuracy of results when so desired, the relation of the extent of error to time and method, the similarity of the academic laboratory to the field laboratory, all these permit an unrivalled opportunity for driving home much broad Engineering philosophy. The assaying processes and apparatus lend themselves peculiarly well for the development of a proper perspective in regard to errors and accuracy in measurements.

The study of Ore Dressing, when accompanied by laboratory work in a well equipped ore dressing laboratory, is one of the most important of the Mining Engineering subjects. Not only is the mechanical treatment of ores a very important branch of Mining Engineering, but the mental processes involved in a study of the fundamental principles underlying the art and the compromise necessary for field practice form one of the best fields for the development of Engineering philosophy. From these points of view the ore dressing laboratory is exceptionally well equipped.

45. *Assaying*:—J. T. King.

Departments 2 and 8, III Year; 1 hour per week; first term.

A first course of lectures on the theory of fire assaying. Emphasis is laid not only on the chemical and metallurgical principles involved, but upon the errors inherent in operators as well as in methods.

Text Book:—Manual of Fire Assaying—Fulton.

46. *Assaying*:—J. T. King.  
Departments 2 and 8, III Year; 3 hours per week; both terms.  
A laboratory course in the determination of the precious metals in ores, milling and metallurgical products. Scorification and crucible assays of ores and products, pure and impure, fluxes, slags and solutions. Buckboard practice, ores with metallica. Copper and lead by electrolysis. Students are expected to do their later assays with despatch and a reasonable degree of accuracy. Neatness of work is required.
47. *Assaying*:—J. T. King.  
Departments 2 and 8, IV Year; 1 hour lecture per week; second term.  
A continuation of course 45. Complex ores. Combination assays. The sampling and assay of bullion. The Platinum group metals. Checks and corrections.
48. *Assaying*:—J. T. King.  
Departments 2 and 8, IV Year; 3 hours per week; second term.  
An advanced laboratory course in which some of the methods of course 47 are used.
49. *Assaying*:—J. T. King.  
Department 6, III Year; 3 hours per week; first term.  
An introductory laboratory course for Chemical Engineers. Some lecture instruction is given. An abbreviation of courses 45 and 46.
50. *Mining*:—H. E. T. Haultain and F. C. Dyer.  
Department 2, I Year; 3 hours per week; second term.  
A laboratory course, including some lectures, being an introduction to certain mining and milling machinery and methods.
51. *Mining*:—H. E. T. Haultain.  
Department 2, II Year and Department 8, III Year; 1 hour per week; first term.  
An introductory course of lectures.
52. *Mining*:—H. E. T. Haultain.  
Department 8, III Year; 1 hour per week; second term.  
An extension of No. 51.
53. *Mining*:—F. C. Dyer.  
Department 2, II Year; 3 hours per week; first term.  
Continuation of No. 50. Rock drills, sampling methods, use of explosives.
54. *Mining*:—H. E. T. Haultain and F. C. Dyer.  
Department 2, III Year; 1 hour per week; both terms.  
Principles of mining.
55. *Mining*:—H. E. T. Haultain.  
Department 2, IV Year; 1 hour per week; both terms.  
Special problems, estimates, reports.

56. *Mine Cost Keeping and Management*:—H. E. T. Haultain.  
Department 2, IV Year; 1 hour per week; both terms.  
One of the fundamental features that must not be lost sight of by the Mining Engineer is, that his work is designed primarily for purposes of financial profit. This course of lectures deals with details from this point of view. The total cost of a ton of ore requiring as it does an understanding of the problems of amortization, is first dealt with in a broad way. Then are considered various problems of cost keeping, leading on to problems of time and motion study which are essential to the development of the fine points of the art in any particular mining problem. The latter part of the course deals with problems of management, the relations of members of the staff to each other, and the relations of the staff to labour.
58. *Ore Dressing*:—H. E. T. Haultain and F. C. Dyer.  
Departments 2 and 8, III Year; 1 hour per week; both terms.  
The general principles of Ore dressing.
59. *Ore Dressing*:—F. C. Dyer.  
Departments 2 and 8, III Year; 3 hours per week; both terms.  
Work with crushing machinery, principles of crushing and grading, screen analyses, concentration with gravity separation apparatus, etc.
60. *Ore Dressing*:—H. E. T. Haultain and F. C. Dyer.  
Departments 2 and 8, IV Year; 1 hour per week; both terms.  
No. 58 continued, study of flow sheets and special problems.
61. *Ore Dressing*:—F. C. Dyer.  
Departments 2 and 8, IV Year; 6 continuous hours per week; first term.  
Advanced work with ore dressing appliances, ore testing and check mill runs.
62. *Ore Dressing*:—F. C. Dyer.  
Department 6k, IV Year; 1 hour per week; both terms.  
General principles of ore dressing.
63. *Ore Dressing*:—F. C. Dyer.  
Department 6k, IV Year; 1 period of 6 hours per week; second term.  
Principles of sampling, crushing and grading, screen analyses, concentration with gravity separation apparatus, flotation, ore testing, etc.
64. *Physics of Ore Dressing*:—H. E. T. Haultain and F. C. Dyer.  
Department 2, III Year; 1 hour per week; both terms.  
Ore dressing methods involve a study of the laws governing the phenomena of surface tension, capillarity and colloidal solutions, in addition to those of hydrostatics and certain phases of hydraulics. This is embodied in a special course of lectures in conjunction with laboratory work in the Ore dressing laboratory.

65. *Theory of Measurement*:—H. E. T. Haultain.

Department 2, II Year; 1 hour per week; first term.

This title is not an entirely suitable one for this course of lectures because it is generally applied to a study of the philosophy of extremely accurate measurements. The Mining Engineer has to continually make satisfactory use of measurements with a wide range of inaccuracy. This course of lectures deals with the philosophy underlying the causes of these errors and the practical application of such approximations. The opportunity is taken in these lectures to deal with the subject of illustrating measurements by graphs.

66. *Introductory Research*:—H. E. T. Haultain and F. C. Dyer.

Department 2, III Year; 3 hours per week; second term.

This is a laboratory course including some lectures and is a preparation for the thesis of the fourth year.

67. *Thesis*.

Department 2, IV Year; 7 hours per week; first term; 10 hours per week, second term, in continuous periods.

Thesis in this department consists mainly in reports on original work done in the laboratories. In the III year the subject "Introductory Research" paves the way for the thesis. During the month of October the student decides on the subject of his thesis in consultation with his professors. After this is decided the student uses his own initiative in the development of his work.

The thesis is divided into three parts. The first part, which is handed in during the first week in November, contains the title, a statement of what the title is meant to convey and an outline of the work that is proposed to be done. The second part is handed in during the first week of January and contains a report of progress to date and enables the professor in charge to keep in closer touch with the work. The third and final part is handed in a week before the examinations and is a report of progress to date with final conclusions. The three parts combined constitute the thesis.

68. *Vacation Work*:—W. A. Parks.

Department 2, II Year.

From students in Department 2, who have been actually engaged during the summer with Government or other approved geological survey parties, geological field notes will be accepted in lieu of construction notes.

69. *Vacation Work*:—H. E. T. Haultain.

Department 2 III Year. (See page 544).

This is a series of letters written during the summer vacation, dealing with various aspects of a mining engineer's work. These are intended to direct and help the student's powers of observation, analysis and criticism as well as being exercises in the art of lucid technical expression.

Four letters are to be written and mailed to the Professor of Mining Engineering, one each month, June, July, August, and September; at least one letter must deal with a labour episode.

70. *Vacation Work*:—H. E. T. Haultain.

Department 2, IV Year.

The student may select either one of the following alternatives:

- A. Four letters to be written and mailed, one each month, June, July, August, and September; at least one letter to be on a labour episode: or
- B. One letter describing a labour episode to be written and mailed to the Professor of Mining Engineering not later than June 30th, and an article of suitable character and length for submitting to the Engineering Institute of Canada or the Canadian Mining Institute as a student's paper, to be written and mailed to the Professor of Mining Engineering not later than September 30th

## ASTRONOMY AND GEODESY

71. *Astronomy, Elementary*:—R. K. Young.

Department 1, II Year; 1 hour per week, both terms.

A course in descriptive Astronomy, explaining the ordinary astronomical terms, and describing the various celestial bodies and their motions. In the evenings opportunity will be given for identifying the stars and for observing with telescopes.

Text book:—Fath, *Elements of Astronomy*.

72. *Astronomy and Geodesy*:—L. B. Stewart.

Department 1, III Year; 2 hours per week; both terms.

The course of lectures deals with the determination of time, latitude, longitude and azimuth, by methods adapted to the use of the surveyor's transit and the sextant. It is designed to fulfil the requirements of the final examinations for Ontario and Dominion Land Surveyors.

In Geodesy an account is given of the principles and methods of a secondary triangulation survey, also of the principles involved in the North-West system of survey.

Text books:—Practical Astronomy as applied to Geodesy and Navigation—Doolittle, *Notes on Practical Astronomy and Geodesy*, Nautical Almanac, 1928.

73. *Field Work*:—L. B. Stewart, S. R. Crerar.  
Department 1, III Year; about 2 hours per week, first term.  
The practical work in this subject comprises observations in the field with the transit and sextant for the determination of time, latitude and azimuth by the methods described in the lectures.
74. *Astronomy (Advanced)*:—L. B. Stewart.  
Department 1a, IV Year; 2 hours per week; both terms.  
The lecture course in this subject comprises the theory and adjustment of the instruments used in connection with a geodetic survey; the methods of taking and reducing observations for time, longitude, latitude, and azimuth, with the precision required on such a survey; and other matters relating to these subjects.
75. *Geodesy and Metrology*:—L. B. Stewart.  
Department 1a, IV Year; 2 hours per week; both terms.  
The lecture course includes a description of the methods of measuring base lines and the angles of a triangulation; the geometry of the spheroid with applications to geodetic problems; the computation of geodetic positions; the solution of large triangles on the earth's surface, and the adjustment of a triangulation; trigonometric and precise spirit levelling; the determination of the figure of the earth by arc measurements, and by the pendulum; the theory of map projections, etc.
76. *Astronomy, Geodesy and Metrology*:—L. B. Stewart.  
Department 1a, IV Year; about 23 hours per week; both terms.  
The practical work in the above subjects includes the observation of meridian transits for time and longitude determinations, and of prime vertical transits for latitude, with the astronomical transit instrument; the observation of meridian zenith distances of stars, and of azimuths at elongation for latitude, with the alt-azimuth; theodolite observations for azimuth; observations for latitude with the zenith telescope; the investigation of the constants of the instruments used, and the reduction of all observations; the measurement of a base line with the steel tape and with invar wires, and the determination of the constants of the tape; the measurement of the angles of a triangulation and the adjustment of the angles of network of triangles, etc. A portion of this work will be taken at the Summer Survey Camp. (See page 35.)

## BIOLOGY

80. *Elementary Biology*:—G. H. Duff.  
Department 6, I Year; 6 hours per week, first term.  
An elementary laboratory course on the nature and identification of plant and animal tissues and products, with microscope practice.

81. *Elementary Biology*:—J. W. MacArthur.  
Department 1b, IV Year.  
A special Course of Laboratory work and demonstrations in General Biology, five hours per week, first term.
82. *Hygiene and Bacteriology*:—D. T. Fraser and R. R. McClenahan.  
Department 1b, IV Year.
- (1) This is a course of twenty-five lectures, dealing with the principles of Hygiene and Sanitary Science and including a discussion of the facts in Bacteriology which are necessary for a proper understanding of Hygiene and Sanitary Science. The particular phases of the subject which are of importance from the standpoint of Sanitary Engineering are dealt with.
  - (2) This is a laboratory course of six hours per week, second term, dealing especially with the Bacteriology of water, milk and sewage.

### CHEMISTRY

85. *General Chemistry*:—E. G. R. Ardagh.  
Departments 1, 2, 3, 6, 7, 8, I Year; 2 hours per week, first term; 1 hour per week, second term.  
A lecture course in general chemistry, with experimental illustrations.
86. *Inorganic Chemistry*:—L. J. Rogers.  
Department 6, I Year; 12 hours per week, second term.  
A laboratory course of quantitative experiments illustrating the use of the sensitive balance, and confirming the fundamental laws of chemistry; qualitative inorganic analysis; quantitative analysis of pure salts.  
Text books:—Analytical Chemistry, Vol. II—Treadwell-Hall; Qualitative Chemical Analysis—A. A. Noyes.
- 87A. *Inorganic Chemistry A*:—E. G. R. Ardagh.  
Departments 1, 2, 3, 6, 7 and 8, II Year; 1 hour per week, first term.  
A continuation of Course 85 dealing especially with the metals.
- 87B. *Inorganic Chemistry B*:—E. G. R. Ardagh.  
Departments 2, 6 and 8, II Year; 1 hour per week, second term.  
A lecture course on theoretical chemistry with special reference to the metals; a continuation of Course 85.  
Text book:—Smith's College Chemistry—Kendall.
88. *Analytical Chemistry*:—L. J. Rogers.  
Departments 2, 6 and 8, III Year; 1 hour per week, both terms.  
A lecture course on the principles of chemical analysis; select gravimetric and volumetric methods; technical analysis.
89. *Analytical Chemistry*:—E. A. Smith.  
Departments 1, 2 and 3, II Year; 6 hours per week, second term;  
Dept. 7, II Year; 6 hours per week, first term.  
Laboratory course in qualitative and quantitative analysis.



90. *Analytical Chemistry*:—J. W. Bain.  
Department 2, II Year; 6 hours per week, one term.  
A laboratory course in the gravimetric determination of metals and acids, with elementary volumetric analysis.
91. *Analytical Chemistry*:—L. J. Rogers.  
Department 8, II Year; about 14 hours per week, first term; about 13 hours per week, second term.  
A laboratory course comprising gravimetric and volumetric methods, acidimetry and alkalimetry.  
Text books:—*Analytical Chemistry*, Vol. II—Treadwell-Hall; *Qualitative Chemical Analysis*—A. A. Noyes.
92. *Analytical Chemistry*:—L. J. Rogers.  
Department 6, II Year; 180 hours.  
A laboratory course in quantitative chemical analysis; inorganic preparations.  
Text book:—*Analytical Chemistry*, Vol. II—Treadwell-Hall.
93. *Engineering Chemistry*:—J. W. Bain.  
Departments 1, 3, 6 and 7, II Year; 1 hour per week, first term.  
A lecture course consisting of a study of the industrial production and application of heat, and of the chemistry of fuel and the products of combustion.
94. *Industrial Chemistry*:—J. W. Bain.  
Department 6, II Year; 1 hour per week, both terms.  
A lecture course on the manufacture of salts, acids, alkalies and inorganic chemicals.
95. *Organic Chemistry*:—M. C. Boswell.  
Departments 1, 2, 3 and 7, II Year; 1 hour per week, second term.  
A lecture course in elementary organic chemistry.
96. *Organic Chemistry*:—M. C. Boswell.  
Department 6, II Year; 2 hours per week, both terms.  
A lecture course dealing with the aliphatic compounds.
97. *Organic Chemistry*:—M. C. Boswell.  
Department 6, II Year; 60 hours, second term.  
A laboratory course in organic preparations.
98. *Physical Chemistry*:—F. B. Kenrick.  
Departments 6, II Year and Department 8 (a), III Year; 2 hours per week, both terms.  
A course of lectures on the elements of chemical mechanics, and the theory of solutions.
99. *Analytical Chemistry*:—L. J. Rogers.  
Department 2, III Year; 9 hours per week, second term.  
A laboratory course on the technical analysis of ores and furnace products.

100. *Industrial Chemistry*:—E. G. R. Ardagh.  
Department 6, III Year; about 7 hours per week, first term, 13 hours per week, second term.  
A laboratory course in industrial chemistry
101. *Analytical Chemistry and Phase Rule*:—L. J. Rogers, J. T. Burt Gerrans.  
Department 8, III Year; about 6 hours per week, second term.  
A laboratory course in analysis and phase rule.
102. *Engineering Chemistry*:—J. W. Bain, E. G. R. Ardagh.  
Departments 1, 2, 3, 6, 7, 8 and 8 (a), III Year; 1 hour per week, both terms.  
A lecture course on the application of chemistry to engineering problems; air, water, the materials of construction, explosives, etc.
103. *Industrial Chemistry*:—E. G. R. Ardagh.  
Department 6, III Year; 1 hour per week, both terms.  
A lecture course on petroleum and its products, coal tar and its products; fats, oils, soap, sugar, starch, gums, rubber; fermentation industries, etc.
104. *Chemical Plant*:—J. W. Bain.  
Department 6, III Year; 1 hour per week, both terms.  
A lecture course on the machinery and plant used in chemical manufacturing.
105. *Organic Chemistry*:—M. C. Boswell.  
Department 6, III Year; 2 hours per week, both terms.  
A lecture course on the aromatic series.
106. *Organic Chemistry*:—M. C. Boswell.  
Department 6, III Year; 85 hours.  
A laboratory course in organic preparations in the aromatic series.
107. *Electrochemistry*:—W. L. Miller.  
Departments 6, 7 and 8, III Year; Department 2, IV Year; 2 hours per week, first term.  
A lecture course on elementary electrochemistry, illustrated by experiments.
108. *Electrochemistry*:—W. L. Miller and J. T. Burt-Gerrans.  
Departments 6, 7 and 8, III Year; 3 hours per week, first term.  
Department 2, IV Year.  
A laboratory course in quantitative measurements to accompany Course 107.
109. *Inorganic Chemistry*:—J. W. Bain.  
Department 6, IV Year; 2 hours per week, both terms.  
A lecture course on chemical theory.

110. *Organic Chemistry*:—M. C. Boswell.  
Department 6, IV Year; 1 hour per week, both terms.  
A lecture course on advanced organic chemistry.
111. *Organic Chemistry*:—M. C. Boswell.  
Department 6, IV Year.  
A laboratory course in advanced organic chemistry; about seventeen hours first term.
112. *Industrial Chemistry*:—J. W. Bain.  
Department 6, IV Year; 1 hour per week, both terms.  
A lecture course on selected subjects in chemical technology.
113. *Industrial Chemistry*:—J. W. Bain, E. G. R. Ardagh, M. C. Boswell.  
Department 6, IV Year.  
A laboratory course in industrial problems.
114. *Electrochemistry*:—J. T. Burt-Gerrans.  
Department 6h, 7h, and 8, IV Year; 2 hours per week, both terms.  
An advanced lecture course on the theory of solutions and electrolysis, and the application to the practice of electro-deposition and electrolytic refining of metals. The course also includes lectures on the electric furnace with special consideration of efficiency.  
Reference books:—Electrometallurgy—Borchers; Electrochemistry—Le Blanc; Electrochemistry—Luepke; Principles of Applied Electrochemistry—Allmand and Ellingham; The Electric Furnace—Stanfield; The Electric Furnace—Pring.
115. *Electrochemistry*:—W. L. Miller and J. T. Burt-Gerrans.  
Departments 6h, 7h and 8, IV Year.  
A laboratory course accompanying Course 114.
116. *Sanitary and Forensic Chemistry*:—J. W. Bain.  
Department 6, IV Year; 1 hour per week, both terms.  
A lecture course on the composition and examination of air, water and food; poisons and their detection, with accompanying laboratory course.
116. (a) *Silicate Chemistry*:—J. B. Ferguson.  
Department 8 (a), IV Year; 2 hours per week, second term. The application of phase rule to the chemistry of refractory materials.
117. *Sanitary Chemistry*:—E. G. R. Ardagh.  
Department 1b, IV Year; 1 hour lecture and 6 hours laboratory, first term; four hours laboratory, second term.  
A lecture and laboratory course on water supply, sewage disposal ventilation, etc.

## ECONOMICS AND BUSINESS ADMINISTRATION

121. *Business*.—W. S. Ferguson.

Departments 1, 2, 3, 6, 7, 8, I Year; 1 hour per week, second term.

A lecture course on the principles underlying accounting and general business methods of a simple nature in order to enable the student to understand simple financial reports.

122. *Technical English*.—J. Murray Robertson.

(a) All Departments, I Year; 1 hour per week, both terms.

A lecture course on the expression of ideas and the compilation and writing of different types of engineering reports; technical exposition; the derivation and use of technical terms; the necessity of accurate expression in professional writing; terminology; the use of graphic methods for presenting facts; abbreviations; numbers; symbols.

(b) Department 4, II Year; 1 hour per week, both terms.

This course of lectures includes a discourse on the literature which refers either directly or indirectly to architecture and the arts. Books are reviewed and discussed in round-table talks and essays prepared for practice in expression. The preparation of specifications and contracts for the execution of construction is continued from the course in the first year, specializing in architectural types.

123. *Economics and Finance*.—C. R. Fay.

All Departments, II Year; 1 hour per week, both terms.

An introduction to the study of Economics. The course will deal in an elementary fashion with the following:

- (1) Scope and Method of Economics.
- (2) Theory of Value and Distribution.
- (3) Structure of Industry and Social Conditions.
- (4) Money, Banking and Public Finance.

Text Book:—Economics for the General Reader—Clay.

124. *Commercial Law*.—A. R. Clute.

Departments 1, 2, 4, 6, 7, 8, III Year; 1 hour per week, both terms.

General Principles of the Law of Contracts, Principal and Agent, Partnership and Limited Companies (with special reference to the Companies Acts). General view of the following:—Negotiable Instruments, Sale of Goods, Bills of Sale and Chattel Mortgages, Suretyship and Guarantee.

Text-Book:—Stephens' Elements of Mercantile Law (8th Edition.)

125. *Engineering Economics*.—C. R. Young.

Departments 1, 2, 3, 7, 8, IV Year; 1 hour per week, second term.

A series of lectures on the principles by which the economic practicability of a project is judged and the comparison of competing proposals is made. Consideration is given to first cost and

annual cost, methods of estimating, fixed charges and operating expenses, valuation and appraisals. Special attention is given to depreciation and the methods of providing for it, as well as to its relation to amortization. Typical numerical problems are discussed and solved.

Text Books:—Engineering Economies—Fish; Financial Engineering—Goldman.

126. *Engineering Law*:—R. E. Laidlaw.

Department 1, IV Year; 1 hour per week, first term.

A course of lectures, co-ordinating Engineering practice and Law as contained in various legislation such as: The Railway Act, Municipal Act, Public Health Act, Arbitration Act, Workmen's Compensation Act, Patents, Copyrights, etc.

127. *Contracts and Specifications*:—C. R. Young.

Departments 1, 4, 8, and 8 (a) IV Year; 1 hour per week, second term.

This course of lectures deals with the fundamental principles of contract and specification writing. The critical examination of typical specifications and agreements by the class, forms an essential feature of the instruction.

Text Book: Elements of Specification Writing—Kirby.

128. *Management*:—C. R. Young.

Department 1, IV Year; 1 hour per week, first term.

A series of lectures dealing with the fundamental principles upon which management is based. The possibilities of effective management are indicated and its basis is shown to exist in suitable organization, adequate equipment and smooth administration. Consideration is given to such matters as selection of personnel, essentials of effective organization for enterprises of widely different character and the art of directing a force so as to attain a desired end in an expeditious and effective manner.

Text Books:—Construction Cost Keeping and Management—Gillette and Dana; Principles of Industrial Organization—Kimball; Administration of Industrial Enterprises—Jones.

129. *Plant Management*:—G. A. Guess.

Department 8 and 8 (a), IV Year; 1 hour per week, second term.

A course of twelve lectures dealing with some phases of labour, plant organization, smelter contracts and markets.

130. *Industrial Management*:—E. A. Allcut.

Departments 3, 6 and 7, IV Year; 1 lecture per week, both terms.

This course includes a study of industrial organization, location, arrangement, construction and equipment of industrial plants for efficiency and economy, process routing, scheduling work,

reports, methods of superintending, employment, systems of compensating labour and systems of distributing indirect expenses.

131. *Railway Economics*:—W. M. Treadgold.

Department 1, (c), IV Year; 2 hours per week, both terms.

The object of this course is to make the student acquainted with the general principle of railroad engineering and the following branches of the subject will be discussed—economic theory of location, train resistance, effect of grade, distance and curvature, rise and fall, maintenance of way, yards and terminals, tunnels and street railway practice.

132. *Municipal Administration*:—P. Gillespie, A. T. Laing.

Department 1 (b), IV Year; 1 hour per week, both terms.

A course of lectures dealing with civics, local improvement laws and assessments, building codes, fire control, transportation, public utilities, etc.

133. *Public Speaking*:—W. H. Greaves.

Department 1, III Year; 1 hour per week, first term.

A course on the principles of public speaking and the means of expression accompanied by practical application and training in actual speaking.

## ELECTRICITY

135. *Electricity*:—H. W. Price.

Departments 1, 2, 3, 6, 7 and 8, I Year; 2 hours per week, both terms.

A course of lectures on basic principles relating to electric circuits, magnetic circuits, instruments and apparatus in general, distribution of electrical energy, etc., illustrated largely from commercial apparatus. The point of view of this work is quantitative rather than descriptive, for it is believed that men who can solve engineering problems are most likely to grasp underlying principles.

136. *Electricity*:—W. S. Guest.

Departments 3, 6, 7 and 8, II Year; 2 hours per week, both terms.

Deals with the theory of electrical measurements, and detailed study of various methods applicable under different conditions in engineering practice to the measurement of resistance, current, potential difference, power and energy; calibration of commercial measuring instruments. The effect of choice of conditions of measurement on the accuracy of the result is considered.

**137. *Electrical Laboratory*:—W. S. Guest.**

Departments 3, 6, 7 and 8, II Year; 3 hours per week, both terms.

This laboratory course is closely associated with the lecture course 136 on electricity for the second year. The more important and useful methods of testing generators and circuits for electromotive force, resistance, current, grounds, etc., are practised, often under conditions such as occur in practice. The work also includes methods of calibration of measuring instruments for voltage, current, power and energy, and certain studies of properties of incandescent lamps.

**138. *Magnetism and Electricity*:—A. R. Zimmer.**

Department 3, III Year; 1 hour per week, both terms.

Department 7, III Year; 2 hours per week, first term; 1 hour per week, second term.

A course of lectures on theory of magnetism and magnetic circuits, theory of direct-current generators, motors, etc.

**139. *Alternating Current*:—A. R. Zimmer.**

Department 3, III Year; 1 hour per week, both terms.

Department 7, III Year; 1 hour per week, first term; 2 hours per week, second term.

A first course of lectures on alternating current, covering principles of measurement and leading to the analytical and graphical treatment of the simpler problems relative to alternating-current circuits and machinery.

**140. *Electrical Laboratory*:—A. R. Zimmer.**

Department 3, III Year; 3 hours per week first term,  $4\frac{1}{2}$  hours per week second term; Department 7, III Year; 6 hours per week, both terms.

This laboratory course is intended to afford the student an opportunity to become familiar with principles involved in continuous-current shunt, series and compound-wound generators and motors, and, to some extent, alternating-current circuits and machinery. Other sections of the work deal with the magnetic properties of iron and steel, and study of iron losses in transformers and generators.

The course is arranged to stand in close relation to the lecture courses in the subjects of magnetism and electricity and alternating current (138, 139) for III Year, and to certain design work (141).

**141. *Electrical Design*:—H. W. Price.**

Department 7, III Year; 1 hour per week, both terms.

A course of lectures dealing with design of electrical apparatus and machinery, accompanied by designs to be worked out in the design room.

**142. *Electrical Design*:—H. W. Price.**

Department 7, III Year; 3 hours per week, both terms.

A design room is set apart for working out designs of electrical apparatus such as transformers, generators, motors, auxiliary apparatus, etc.

Special forms and notes are employed, arranged to suit the various studies. Certain models are provided to assist where necessary.

**143. *Electricity*:—H. W. Price.**

Departments 1, 2 and 8, III Year; 1 hour per week, both terms.

A continuation of Course 135, First Year, adapted to the requirements of non-electrical students. It deals with problems on direct-current circuits and apparatus; magnetic circuits; power measurements; alternating current principles and machinery; transmission; power-plants, etc.

**144. *Electrical Laboratory*:—H. W. Price, A. R. Zimmer.**

(a) Department 1.

III Year; 3 hours per week, first term.

IV Year; Options *d* and *e*, 3 hours per week, second term.

(b) Department 2.

IV Year; 3 hours per week, first term.

(d) Department 6.

III Year; 3 hours per week, second term.

(e) Department 8.

III Year; 3 hours per week, both terms.

These courses are arranged to suit the requirements of the departments concerned. The experiments are planned with the idea of affording a general knowledge of circuits, power measurements, direct-current and alternating-current machinery and transmission of power.

**145. *Applied Electricity*:—(a) Symbolic and Graphical Methods,**

(b) Wave Form and Transmission Line—T. R. Rosebrugh.

Department 7, IV Year; 2 hours per week.

(a) Complex quantities and their use in a.c. problems. Loci for current and voltage vectors for given limitations on circuit constants. Short line distribution circuit loci; approximate graphical theory of synchronous motor.

(b) Non-sinusoidal alternating current waves, analysis of waves, forms of symmetry, three phase limitations, elimination of undesired harmonics, heating of rotary converters; power, current, and voltage readings as influenced by wave form.

Long distance transmission line; principles and calculation. Unequal lines in tandem and in parallel.



*Applied Electricity, (c) A.C. Machinery and Measurements:—H. W. Price.*

Department 7, IV Year; 2 hours per week.

Polyphase alternating-current measurements of power, reactive power, apparent power, finding the indications of meters from given wiring diagrams, constructing wiring diagrams to obtain required meter indications. Potential and current transformers. Meter indications with distorted wave forms. Power transformers. Properties of alternators; induction motors of squirrel cage and wound-rotor types; synchronous motors; regulators; current-limiting reactors; arresters; and other general apparatus.

**146. *Electrical Laboratory:—A. R. Zimmer.***

Department 7, IV Year, in connection with 145; 20 hours per week.

This laboratory course involves a thorough study of principles and properties of single and polyphase circuits and apparatus. Both vector and analytical methods are applied to the solution of problems based on tests made on laboratory machines.

The work deals mainly with constant-voltage and constant-current transformers, single and polyphase alternators, synchronous motors, rotary converters, induction and single phase commutating motors, transmission line, etc. The work does not consist only of factory tests, but is designed to lead the student to apply theory to practice as illustrated in the apparatus under test, with a view to an exact understanding of methods and an appreciation of limitations under many conditions. Free use is made of the oscillograph as a necessary device for "seeing" conditions under investigation. The best commercial measuring instruments are available.

**147. *Radiotelegraphy:—T. R. Rosebrugh.***

Department 7. Option *r*, IV Year, in connection with 148; 2 hours per week.

Natural oscillations of simple and simply coupled circuits. Action of C.W. on circuits of the most general character. Radiation of antennas. Theory of modulation in radiotelephony. Energy control and transformation by vacuum tubes.

**148. *Radiotelegraph Laboratory:—C. I. Soucy.***

Department 7. Option *r*, IV Year, in connection with 147; 9 hours per week.

The work in this laboratory covers the principles and the technique of measurements at radio frequencies. This includes measurements of wave length, resonance, coupled circuits, inductance, capacity, energy distribution, resistance, etc., at radio frequencies.

Considerable work is also done with the three electrode vacuum tube and its uses in radio and audio-frequency circuits.

## ENGINEERING DRAWING AND DESCRIPTIVE GEOMETRY

- 160. *Descriptive Geometry*;**—J. R. Cockburn.  
Departments 1, 2, 3, 6, 7 and 8, I Year; 1 hour per week; both terms.  
This course of lectures deals chiefly with the principles of orthographic and oblique projections and the application of such principles to the solutions of problems relating to straight lines and planes.
- 161. *Descriptive Geometry*;**—J. R. Cockburn.  
Department 4, I Year; 1 hour per week; both terms.  
This course of lectures deals chiefly with the principles of orthographic and oblique projections and the application of such principles to the solution of problems relating to straight lines and planes, special reference being made to the determination of shades and shadows.
- 162. *Descriptive Geometry*;**—J. R. Cockburn.  
Departments 1, 2, 3 and 7, II Year; 1 hour per week, both terms.  
This course of lectures is a continuation of the work taken in the first year with the following additions: Problems relating to curved surfaces, principles of shades, shadows and perspective.
- 163. *Descriptive Geometry*;**—J. R. Cockburn.  
Department 4, II Year; 1 hour per week, both terms.  
This course of lectures is a continuation of the work taken in the First Year with the addition of problems relating to curved surfaces, shades, shadows and perspective.
- 164. *Descriptive Geometry*;**—J. R. Cockburn.  
Department 1, III Year; 1 hour per week, first term.  
This course of lectures deals with spherical projections, the principles of mapmaking, and the graphical solution of spherical triangles.
- 166. *Engineering Drawing*;**—J. R. Cockburn, W. J. T. Wright.  
Departments 1, 2, 3, 7 and 8, I Year; 11 hours per week, first term; 18 hours per week, second term.  
Copying from the flat, lettering, topography; graphical solution of problems in statics; problems in descriptive geometry, relating to both orthographic and oblique projections; the plotting of original surveys; measured drawings.
- 167. *Engineering Drawing*;**—J. R. Cockburn, W. J. T. Wright.  
Department 4, I Year.  
Lettering, the graphical solution of problems in statics; problems in descriptive geometry, relating to both orthographic and oblique projections; measured drawings.
- 168. *Engineering Drawing*;**—J. R. Cockburn, W. J. T. Wright.  
Department 6, I Year; 8 hours per week, first term.  
Copying from the flat, lettering, graphical solution of problems in statics, problems in descriptive geometry.

169. *Engineering Drawing*:—J. R. Cockburn, W. J. T. Wright.  
Departments 1 and 2, II Year. Department 1, 4½ hours per week, first term; 13½ hours per week, second term. Department 2, 3 hours per week first term; 12 hours per week, second term.  
Colouring and shading as applied to both topographical and construction drawings; problems in descriptive geometry relating to solids bounded by curved surfaces; principles of shades, shadows and perspective; solution of problems in optics and strength of materials; measured drawings; elementary design.
170. *Engineering Drawing*:—J. R. Cockburn, W. J. T. Wright.  
Departments 3 and 7, II Year; Department 3, 15 hours per week, first term; 7½ hours per week second term; Department 7, 12 hours per week, both terms.  
Colouring and shading as applied to construction drawings; problems in descriptive geometry relating to solids bounded by curved surfaces; principles of shades, shadows and perspective; solution of problems in optics, theory of mechanism and strength of materials; measured drawings; elementary design.
171. *Engineering Drawing*:—J. R. Cockburn.  
Department 4, II Year.  
Principles of shades, shadows and perspective; problems in descriptive geometry relating to solids bound by curved surfaces; solution of problems in strength of materials.
172. *Engineering Drawing*:—J. R. Cockburn, W. J. T. Wright.  
Department 6, II Years; 7 hours per week, first term; 3 hours per week, second term.  
Department 8, II Year; 3 hours per week, first term; 6 hours per week, second term.  
(Same as Department 3 with the exception that Dept. 6 has no descriptive geometry.)
173. *Engineering Drawing*:—W. B. Dunbar.  
Department 1, III Year; 15 hours per week first term; 12 hours per week, second term.  
Principles of mapmaking, spherical projection; problems in theory of construction; original design of various structures.
174. *Engineering Drawing*:—W. B. Dunbar.  
Department 2, III Year; 9 hours per week, first term.  
Problems in theory of construction; original design.
177. *Engineering Drawing*:—W. B. Dunbar.  
Departments 3, 6 and 8 (a), III Year; Department 3, 9 hours per week, first term; Department 6, 6 hours per week, first term; Department 8 (a), 6 hours per week, both terms.  
Problems in design dealing with the theory of structures.

178. *Structural Design Drawing*.—W. J. Smither.  
Department 1 (c), IV Year; 22 hours per week, both terms.  
Problems in structural design.
179. *Structural Design Drawing*.—W. J. Smither.  
Department 1b, IV Year; 5 hours per week, second term.  
Department 1d, IV Year; 4 hours per week, first term; 8 hours per week, second term.  
Department 1e, IV Year; 6 hours per week, both terms.  
Problems in structural design.
180. *Structural Design Drawing*.—W. J. Smither.  
Department 3, IV Year; 3 hours per week, first term.  
Problems in mill building design.
181. *Structural Design Drawing*.—W. J. Smither.  
Department 3, IV Year, Option (b); 3 hours per week, first term.  
Problems in reinforced concrete design.
182. *Engineering Drawing*.—W. B. Dunbar.  
Department 8, III Year; 3 hours per week, first term.  
Plotting metallurgical flow sheets.
183. *Structural Design Drawing*.—J. Roy Cockburn.  
Department 8 (a), IV Year; 6 hours per week, both terms.  
Original design of ceramic plants, driers, kilns, etc.
184. *Vacation Work*.—J. R. Cockburn.  
Departments 1, 2, 3, 4, 6, 7, II Year.  
This work consists of construction notes which are to be neat and complete dimensioned sketches in pencil of any structures, machines or plants which may be of interest. Any object chosen should be represented and dimensioned in such a manner that it could be completely constructed from the notes as the only available information.

Vacation notes must be submitted to the Department of Engineering Drawing on or before the first day of the session.

Vacation notes must be on construction only, and contains not less than twenty, nor more than thirty pages of sketches (except in the Department of Architecture). These sketches must be freehand pencil drawings with figured dimensions.

Notes must be made in standard note books approved by the Faculty. Notes which have been taken during the session in connection with the work in drawing will not count as vacation work.

The minimum percentage of marks required for practical work must be made in the case of vacation notes.

ENGINEERING PHYSICS

185. (a) *Illuminating Engineering*:—G. R. Anderson.  
Departments 3 and 7, I Year.  
A course on the production and distribution of artificial light. Photometry and illumination calculations. Principles of interior lighting.  
Lectures and laboratory work, both terms.
185. (b) *Geometrical Optics*:—G. R. Anderson.  
Departments 1 and 6, I Year.  
Nature of light, reflection, refraction, and dispersion. Theory of optical instruments. Polarization of light and its applications.  
Lectures and laboratory work, both terms.
186. *Hydrostatics*:—G. R. Anderson.  
Departments 1, 6, 7, II Year; Department 3, II Year, lectures only.  
Laws of fluid pressure and application to machines. Density of solids, and fluids. Theory of flotation.  
Lectures and laboratory work, second term.
187. *Heat*:—G. R. Anderson.  
Departments 1, II Year.  
Generation and propagation of heat. General and industrial thermometry, calorimetry and pyrometry. Linear and cubical expansion, gas laws. Specific heat of solids, liquids and gases, latent heat of fusion and vaporization. Mechanical equivalent of heat Carnot cycle.  
Lecture and laboratory work. Fall term.
188. *Photography*:—K. B. Jackson.  
Department 1, II Year.  
The camera and its adjustments, lenses, shutters, screens. Plates for various purposes, films, prevention of halation. Lighting, exposure, development. Paper of various kinds, printing, enlargement and reduction, blue printing and allied processes. Record photography, photogrammetry and photo-surveying. Photography in colour.  
Lectures Fall term, and laboratory work both terms.
189. *Illumination*:—G. R. Anderson.  
Department 4, II Year.  
A special course on interior illumination, and the design of lighting installations for private and public buildings.
190. *Acoustics*:—G. R. Anderson.  
Department 4, III Year.  
Elementary acoustics, including production of sound by vibrating bodies. Special attention to the acoustics of buildings including the properties and uses of deadening material and calculations of reverberation.

191. (a) *Acoustics*:—G. R. Anderson.  
Department 7r, IV Year.  
Wave motion, Fourier's theorem, laws of vibrating systems, musical scales. Reflection and refraction of sound waves.  
Combined lecture and laboratory course, first term only.
191. (b) *Photographic Surveying*:—G. R. Anderson.  
Department 1a, IV Year; 1 hour lecture and 2 hours laboratory, first term.  
This course presupposes a general knowledge of photographic processes as given in the second year. Treatment of a photograph as a perspective drawing from which plan and elevation to scale may be obtained under certain conditions. The intersection method of photographic surveying, its advantages and limitations. The stereoscopic method with its advantages and disadvantages. Method of plotting. Accuracy of results.
192. *Illumination Design*:—G. R. Anderson.  
Department 7i, IV Year.  
The design, installation and maintenance of artificial lighting for commercial and industrial operations. Street lighting. Economics of illumination.

## GEOLOGY

193. *Field Work*:—E. S. Moore.  
Department 2, III Year; one week preceding the opening of the first term.
194. *Pleistocene Geology and Physiography*:—A. MacLean.  
Departments 2 and 8 (a), IV Year; 1 hour per week, both terms.  
*Pleistocene Geology*.—Lectures on the formation and distribution of the drift deposits of North America, with brief references to other regions. Glacial, Interglacial, and Postglacial beds are described, changes of climate are discussed with their probable causes, and the economic features of the clays, sands, and gravels are pointed out.  
*Physiography*.—A course of lectures on the surface forms of the earth, with the geological factors which have produced them. The broad features of the earth, its plains, tablelands, hills, valleys, mountains, oceans, rivers, and lakes are discussed in a general way; methods of topographical surveying and mapping are referred to, and the chief physiographic areas of Canada are described.  
Works of Reference:—Ice Ages, Recent and Ancient—Coleman;  
Physiography—Salisbury.

195. *Elementary Geology*:—W. A. Parks.  
Departments 1, 2, II Year; 2 hours per week, second term.  
This course deals chiefly with historical geology with special reference to Canadian formations.  
Works of Reference:—Introduction to Geology—Scott; Elementary Geology—Coleman and Parks.
196. *Geology and Ore Deposits*:—A. MacLean.  
Department 8, II Year; 2 hours per week, both terms.  
Lectures and laboratory work on historical, structural, and economic geology, designed to familiarize the student with the more important principles, facts, and terms of general geology.  
Works of Reference:—As in Course 195.
197. *Engineering Geology*:—A. MacLean.  
Department 1 and 8 (a), III Year; 1 hour per week, both terms.  
This course deals with the application to engineering of dynamic, structural, and economic geology.  
Works of Reference:—Engineering Geology—Ries and Watson.
198. *Dynamic and Structural Geology*:—A. MacLean.  
Department 2, III Year; 1 hour per week, first term.  
Lectures on geological forces and their effects. Particular attention is given to those aspects of the subject which apply in mining.
199. *Precambrian Geology*:—E. S. Moore.  
Department 2, IV Year; 2 hours per week, first term.  
Lectures on the Precambrian formations of Canada—their rocks, distribution, relationships, and economic features. Briefer accounts are given of similar formations in the United States and elsewhere.  
Works of Reference:—Reports of the Geological Survey of Canada and of the Ontario Department of Mines; Reports of the United States Geological Survey.
200. *Mining Geology*:—E. S. Moore.  
Department 2, IV Year; 2 hours per week, second term.  
A course of lectures on geological problems associated with mining, typical mining regions in Canada, the United States, and elsewhere being discussed from the geological side.  
Works of Reference:—Mineral Industry; Geology Applied to Mining—Spurr; and the works mentioned under Course 199.
201. *Geological Excursions*:—The Staff in Geology.  
Departments 2 and 8 (a), IV Year.  
During October and November weekly trips will be made to points of interest near Toronto.
202. *Economic Geology*:—E. S. Moore.  
Department 2, III Year.

(a) *Ore Deposits*: 1 hour per week, both terms.

Discussion of the origin and classification of ore deposits, the mode of occurrence of the chief ores, and statistics of production. Special attention is given to the metals mined in Canada.

(b) *Economic Geology of the Non-metals*: 2 hours per week, second term.

Lectures on the origin and mode of occurrence of the valuable non-metallic substances—coal, oil, building stone, gypsum, cement materials, etc.

Works of Reference:—Economic Geology—Ries; General Economic Geology—Emmons; Ore Magmas—Spurr; Coal—Moore; Practical Oil Geology—Hager.

203. *Economic Geology*:—E. S. Moore.

Department 2, III Year; 2 hours per week, second term.

Laboratory work on ores, manner of occurrence, vein structure, etc., also the examination and construction of geological maps and sections of typical mining regions.

204. *Special Geology*:—A. MacLean.

Department 1 (e), IV Year; 1 hour lecture and 1½ hour laboratory work per week, second term.

A lecture and laboratory course on superficial geology, physiographic control, water geology, etc.

Works of Reference:—Political and Commercial Geology—J. E. Spurr.

## HYDRAULICS

205. *Hydraulics*:—R. W. Angus.

Departments 1, 2, 3, 6, 7, III Year; 2 hours per week, both terms.

This is a course of lectures in hydraulics devoted to the development and discussion of formulae relating to the flow of water in pipes, the measurement of discharge by various methods, such as orifices and weirs, the conditions of flow obtaining in open channels, artificial and natural, and in pipes flowing partially full, together with other kindred subjects.

The object of this course is to provide the student with a good working knowledge of the fundamental principle of hydraulics, such as is useful in practical work, and is necessary to the intelligent investigation of more advanced problems, such as the design of water supply, sewerage and irrigation system, and water power plants.



206. *Hydraulic Laboratory*.—R. W. Angus, R. Taylor.

Departments 1, 2 and 3, III Year; one 3 hour period per week, second term.

Departments 6, 7, III Year; 4 periods of 3 hours each.

The work in this course is intended to illustrate the lecture course given in hydraulics and to give the student some working acquaintance with the formulae met with in practice. Experiments are made to determine the coefficients for orifices of the various types used in practice and for a weir. The results of these experiments are used in measuring the discharge in subsequent experiments on meters and for the determination of hydraulic resistances in various cases of flow in pipes. The complete course illustrates very fully the application of the course of lectures to actual cases.

207. *Hydraulics*.—R. W. Angus.

Departments 1 (d), 3 and 7 (d), IV Year; 1 lecture per week, both terms.

A course of lectures dealing with the various problems of unsteady flow such as occurs in power lines, penstocks, etc. Much of the work is done by the process of arithmetic integration, and the lecture work is supplemented by problems solved by the students in the work rooms, the time for which is included in course 209. Surges, water hammer, stream flow data, etc., are discussed.

The problems of collection of water for power purposes, use of the mass curve, rainfall and evaporation, turbine governing, etc., are also treated as far as possible.

208. *Hydraulics*.—R. W. Angus.

Departments 1 (d), 3 and 7 (d), IV Year; 2 lectures per week, both terms.

The most important question considered and to which most of the lectures are devoted is the theory of turbines and centrifugal pumps, the effect of the design on the speed, discharge and efficiency being fully taken up. The course includes the selection of turbines and pumps for given service intakes, draft tubes and all matters connected with hydraulic power plants.

209. *Hydraulics*.—R. W. Angus, R. Taylor.

Departments 1 (d) and 7 (d), IV Year; about 10 hours per week in 3 hour periods, both terms; Department 3, average of  $7\frac{1}{2}$  hours per week in 3 and 2 hour periods.

A laboratory course devoted to experimental work on turbines of various types and centrifugal and turbine pumps and other similar devices. This experimental work is arranged to illustrate the lectures on turbine and pump design. The experiments are made on hydraulic models and on two large turbine pumps used in the

laboratory supply, as well as on apparatus specially designed for instruction. Various methods of measuring water-power and the efficiency of machines are also given. A list of the equipment now available, and which is used in this course, is given at the end of the Calendar.

210. *Hydraulic Laboratory*;—R. W. Angus, R. Taylor.  
Department 8, IV Year; 3 hours per week, second term.  
A laboratory course of experiments on orifices, weirs, meters, etc.  
See No. 206.
211. *Hydraulics*;—R. Taylor.  
Department 1b, 1a, IV Year; one hour lecture per week, first term.  
A laboratory course of 3 hours per week, first term, on measurement of water, flow in open channels and on pumps.
212. *Hydraulics*;—R. Taylor.  
Department 3, IV Year; one hour lecture per week, both terms.  
A lecture course on pumps and other hydraulic machinery.

### HEAT ENGINES

216. *Steam and Heat Engines*;—E. A. Allcut.  
Departments 3 and 7, II Year; 1 lecture per week, both terms.  
Departments 2 and 8, II Year; 1 lecture per week, first term.  
A course of lectures dealing with the history and development of the steam engine with special reference to the theory and design of valves and valve operating mechanisms. The principles of heat engines and the various forms of heat engine are also discussed briefly.
217. *Thermodynamics*;—E. A. Allcut.  
Departments 3, 6 and 7, III Year; 2 lectures per week, both terms.  
In this lecture course the laws of heat are used to develop the characteristic equation for a perfect gas and the use of thermal lines on the pressure-volume diagram. The properties of Carnot's cycle are then considered, followed by application of these principles to the hot-air engine, internal combustion engine and air compressor. A consideration of the properties of vapours and their application to the steam engine cycle concludes the course.
218. *Heat Engines*;—E. A. Allcut.  
(a) Departments 3 and 7, III Year; 1 lecture per week, both terms.  
This course of lectures is intended to supplement the general lecture course in Thermodynamics by showing the practical application of the laws discussed therein. The laws of combustion, their application to the boiler practice and the generation and uses of steam are the principal points considered.

- (b) Department 3, III Year; 1 lecture per week, both terms.

These lectures are a further development of the internal combustion work commenced in the Second Year, the influence of thermodynamic considerations on the design of heat engines, and problems in heat transfer, being discussed. The laws of heat transmission and their influence on Heating and Ventilation problems are also considered.

- 219. *Thermodynamics and Mechanical Laboratory*;**—R. W. Angus, E. A. Allcut, J. E. B. Shortt.

Department 3, III Year; one 3 hour period per week, both terms.

Department 7, III Year; 3 hours per week, first term; 1 hour per week, second term. Time to be in three-hour periods.

This laboratory course is designed to assist in a clearer understanding of thermodynamics, machine design and mechanics of machinery. The work in thermodynamics consists in the setting of slide valves, indicating engines measuring the brake horse-power, simple engine and boiler tests and the testing of gas and gasoline engines under various conditions. The mechanical laboratory work deals with the efficiency of belts as well as of several machines of simple construction. An examination of lubricating oils is also made by means of well-known methods. Experiments are also made on the balancing of reciprocating and rotating masses.

- 220. *Thermodynamics*;**—E. A. Allcut.

Departments 3 and 7 (f), IV Year; 2 lectures per week, both terms.

This is a continuation of course 217, the general thermodynamic theory being studied from the conception of the thermodynamic surface. The theory of the flow of gases and vapours through orifices, nozzles and pipes is then discussed and its application to the various forms of turbines is outlined. Following this, the principles of refrigeration, binary fluid engines, internal combustion engines and heat transmission are dealt with.

- 221. *Heat Engines*;**—E. A. Allcut.

Departments 3 and 7 (f), IV Year; 1 lecture per week, both terms.

This course is a continuation of the lectures on heat engines given in the Third Year, with special application to the steam power plant. The causes of the various losses occurring in steam engines and the considerations that influence them are studied in detail. Special attention is given to condensing plants, consumption records and other factors upon which the efficiency of a power plant depends; also problems in heat transmission.

- 222. *Thermodynamics*;**—R. W. Angus, E. A. Allcut, J. E. B. Shortt.

Departments 3, IV Year; average  $7\frac{1}{2}$  hours per week, and 7 (f), IV Year about 9 hours per week, all in 2 or 3 hour periods.

The work in this year is a continuation and extension of the work covered in the third year laboratory course. Careful tests are made of heaters and of engines of various types, such as simple, tandem and cross-compound steam engines; steam turbine; refrigerating machine; injectors and steam pumps, etc.; and an application is made of Hirn's analysis and the entropy diagram to the results obtained. A complete set of experiments is made on each machine and the result plotted so as to show clearly to the student the effect of various alterations in the adjustment of the engine on the resulting efficiency.

Several modern gas and gasoline engines give ample opportunity for the study of this type of engine, and facilities are provided for sampling the gas supply and exhaust.

Two experimental stacks and three boilers enable results to be obtained on boiler efficiency and chimney draft.

**223. *Thermodynamics*:—E. A. Allcut.**

Departments 1 and 8 (a), III Year; 1 lecture per week, both terms

Departments 2 and 8, IV Year; 1 lecture per week, both terms.

The general principles of thermodynamics, the properties of a perfect gas and their application to the Carnot cycle are first studied. This is followed by a consideration of the air compressor cycle, some details of air compressor operation and the theory of the flow of air through pipes and orifices. The properties of vapours and the principles of steam engine operation are also discussed.

**224. *Thermodynamic Laboratory*:—J. E. B. Shortt.**

Departments 1, 6 and 8 (a), III Year; seven three hour periods, second term; Departments 2 and 8, IV Year; 3 hours per week, first term.

A course of experiments with steam and gas engines, compressed air, etc.

**225. *Motive Power*:—R. W. Angus.**

Department 1 (c), IV Year; one hour per week, both terms.

A course of lectures covering boiler capacity, locomotive horse-power, tractive effort, etc., necessary to carry specified trains over different conditions of roadbed.

## MACHINERY

**230. *Theory of Mechanisms*:—J. H. Parkin.**

Departments 3 and 7, II Year; lectures 2 hours per week; problems  $1\frac{1}{2}$  hours per week, both terms.

This course of lectures treats of the elementary construction of machines and of the motions of the various parts. Methods of determining linear and angular velocities, methods for the solution of elementary problems involving forces and methods for the determination of the mechanical efficiency of machines

are discussed. Velocity diagrams, crank effort and torque diagrams are plotted. Cams, toothed gearing and various types and applications of trains of gearing are considered.

Applications of the methods described are made to various machines including engines, machine tools, link motions, etc., and the lecture work is followed up by the solution of numerous examples in the drafting room.

Text Book:—Theory of Machines—Angus.

**231. *Mechanics of Machinery*:—J. H. Parkin.**

Departments 3 and 7, III Year; 1 hour per work, both terms.

This course is devoted to a consideration of the speed regulation and balancing of machines, and comprises lectures on the theory of various forms of governors, kinetic energy of machines and determination of speed fluctuations, the proper weight of fly-wheel, acceleration and inertia effects, and balancing.

The methods of analysis employed are those developed in course 230.

Text Book:—Theory of Machines—Angus.

**232. *Elementary Machine Design*:—W. G. McIntosh.**

Departments 3, 6 and 7, II Year; 1 hour per week, both terms.

This is a preparatory course intended to familiarize the student with the different shop methods and processes, casting, forging, machining, etc., used in the production of machine parts, to enable him to make proper provision in the design of such parts to facilitate their production.

In addition, the various standards, machine and pipe threads, tapers, pipe fittings, etc., are described and mechanical drafting room practice explained.

Tolerances, limits, fits and gauges are discussed.

The design of simple machine fastenings and parts is taken up and examples worked out in the drafting room.

**233. *Machine Design*:—J. H. Parkin and W. G. McIntosh.**

Departments 3 and 7, III Year; 2 lectures per week, both terms.

The design work averages 7 hours per week for Department 3, and 4 hours per week for Department 7, the periods to be of not less than 2 hours' duration.

The lectures in this course deal with the design of various machine elements, including shafting, bearings (journal, thrust, ball and roller), belts, pulleys, fly-wheels, clutches, springs, machine frames, etc.

The problems worked out in the drafting room are planned to include the design of all of the above and with a view to developing the student's judgment and sense of proportion in design.

Text Book:—Principles of Machine Design—Norman.

234. *Machine Design*:—W. G. McIntosh.

Department 6, IV Year; Department 8 and 8 (a), III Year;  
Department 2, II Year; 1 lecture per week, both terms.

The design work occupies 3 hours per week for the second term only. The lectures in this course deal with the design of various machine elements, particularly those likely to be met with in Chemical and Metallurgical plants, and in mining work.

The problems worked out in the drafting room are designed to give the student training in the general lay-out of shafting and plant machinery, as well as in the design of simple parts for chemical and metallurgical apparatus, and mine machinery.

235. *Advanced Machine Design*:—J. H. Parkin and W. G. McIntosh.

Department 3, IV Year; 2 lectures per week.

The design work averages 7 hours per week, the periods to be of not less than 2 hours' duration.

The work of this course is devoted to the design of complete machines with the object of giving the student practice not only in the design of various details, but also in working in the various elements into a machine of smooth and harmonious design. The machines chosen as examples for design involve as many new machine elements as possible in order to broaden the training of the student.

Text Book:—*Principles of Machine Design*—Norman.

## MATHEMATICS

236. *Calculus*:—M. A. Mackenzie and S. Beatty.

All Departments, I Year; 2 hours per week, each term.

Treatment of limits with special reference to those pertaining to exponentials and logarithms. Derivation of the fundamental formulae of the differential and integral calculus, with early application to simple problems concerning graphs, areas, volumes, lengths, etc.

237. *Calculus*:—M. A. Mackenzie and S. Beatty.

Departments 1, 3, 6 and 7, II Year; 2 hours per week, each term.

Continuation of course 236. The elementary theory reviewed and extended. Special attention to applications with problems in Engineering mostly in view.

238. *Analytical Geometry*:—I. R. Pounder and D. A. F. Robinson.

All Departments, I Year; 1 hour per week, first term, 2 hours per week, second term.

The course in Elementary Analytical Geometry covers the more familiar propositions in connection with the straight line, circle, parabola, ellipse and hyperbola. The subject is treated so as to illustrate the general methods of analytical geometry.

- 239. *Trigonometry, Spherical*:**—L. B. Stewart.  
 Department 1, II Year; 1 hour per week, first term.  
 A course of lectures includes the derivation of formulæ and their application to the solution of triangles and to practical problems.  
 Text Book:—Spherical Trigonometry—Todhunter and Leatham.
- 240. *Least Squares, Method of*:**—L. B. Stewart.  
 Department 1, III Year; 1 hour per week, second term.  
 The course of lectures includes: The general principles of probability, the law of error, direct measurements of equal and different weights; mean square and probable errors; indirect measurements; conditioned observations; applications to empirical constants and formulæ, etc.  
 Text book:—Least Squares—Merriman.

### METALLURGY

- 241. *Elementary Metallurgy*:**—G. A. Guess.  
 Departments 1, 2, 3, 6 and 8, II Year; 1 hour per week, second term.  
 A course of about 12 lectures on furnace metallurgy and present practice, with special reference to iron and steel.
- 242. *Fuels and Combustion*:**—G. A. Guess.  
 Department 8, II Year; 1 hour per week, both terms.  
 A lecture course dealing with fuels, their use, preparation, calorific value and combustion.
- 243. *Metallurgy*:**—G. A. Guess.  
 Departments 2, 6, III Year; 1 hour per week, both terms.  
 Fuels, temperature of combustion, specific heat, conductivity and problems thereon; chimneys, furnaces, refractories, outline of furnace metallurgy and hydro-metallurgy.
- 244. *Physical Metallurgy*:**—J. A. Newcombe.  
 Departments 2, 3, 6 and 7, III Year; 2 hours per week, second term.  
 The physical properties and structure of iron and steel and the more common alloys.
- 245. *Metallurgy*:**—G. A. Guess, J. E. Toomer.  
 Department 8, III Year; 2 hours per week, first term; 1 hour per week, second term.  
 A lecture course on General Metallurgy accompanied by 3 hours laboratory per week, first term, and 6 continuous hours per week second term.
- 246. *Physical Metallurgy*:**—J. A. Newcombe.  
 Department 8, III Year; 1 hour per week, both terms.  
 Changes of phase and of state, pyrometry, preparation of alloys, miscibility of metals, binary, ternary and complex alloys, the use of the microscope, with 3 hours laboratory per week, first term.

247. *Metallurgy*:—G. A. Guess, J. E. Toomer.  
Departments 2 and 6 (k), IV Year; 1 hour lecture per week, both terms; 6 continuous hours laboratory per week, second term.  
General metallurgy and metallurgical problems.
248. *Metallurgy Problems*:—G. A. Guess, J. E. Toomer.  
Department 8, IV Year; 2 hours lecture and 4 hours laboratory, both terms.  
Metallurgical book-keeping, balance sheets, thermal balance sheets, methods and processes.
249. *Metallurgy*:—G. A. Guess.  
Department 8, IV Year; 1 hour per week, both terms.  
Critical reading and discussion of papers and articles, describing metallurgical processes or dealing with plant arrangement and construction. Metallurgical flow sheets of typical plants.
250. *Physical Metallurgy*:—J. A. Newcombe.  
Departments 6 (k) and 8, IV Year; 1 hour lecture and 3 hours laboratory per week, both terms.
251. *Metallography*:—J. A. Newcombe.  
Department 2, IV Year.  
A laboratory course of 3 hours per week, second term.
252. *Physical Metallurgy*:—J. A. Newcombe.  
Department 1 (c), (d) and (e), IV Year; 1 hour per week, both terms.  
The physical properties of metals and alloys used in Civil Engineering practice—specifications.
253. *Heat Treatment of Iron and Steel*:—J. A. Newcombe.  
Department 3, IV Year; 1 lecture per week, both terms.  
Heat treatment of iron and steel, case carburizing, case hardening and malleableizing.

## CERAMICS

254. (a) *Ceramics*:—R. J. Montgomery.  
Department 8 (a), III Year; 4 hours per week, first term; 2 hours per week, second term.  
Lectures covering origin, properties and classification of clays and other ceramic materials from a manufacturing standpoint; methods of manufacture, including preparing, shaping and burning clay ware.
254. (b) *Ceramics*:—R. J. Montgomery.  
Department 8 (a), III Year; 2 hours per week, second term.  
Lectures on the composition of clear and coloured glazes.



254. (c) *Ceramics*:—J. E. Toomer.  
Department 8 (a), III Year; 1 hour per week, second term.  
Lectures and problems on calculations necessary for the compounding of ceramic bodies and glazes.
254. (d) *Ceramics*:—R. J. Montgomery.  
Department 8 (a), III Year; 6 hours per week, both terms.  
Work on the identification and testing of clays.
254. (e) *Ceramics*:—J. E. Toomer.  
Department 8 (a), III Year; 6 hours per week, both terms.  
Laboratory practice in the analysis of ceramic materials.
254. (f) *Ceramics*:—R. J. Montgomery.  
Department 8 (a), IV Year; 2 hours per week, first term.  
Lectures on composition and properties of refractory material; composition of bodies made with ceramic material, with special reference to white-ware and porcelain.
254. (g) *Ceramics*:—R. J. Montgomery.  
Department 8 (a), IV Year; 2 hours per week, second term.  
Lectures on the manufacture and composition of glass; manufacture and composition of iron enamels.
254. (h) *Ceramics*:—R. J. Montgomery.  
Department 8 (a), IV Year; 1 hour per week, first term.  
Lectures on specifications, testing and methods of testing ceramic materials.
254. (i) *Ceramic Laboratory*:—R. J. Montgomery.  
Department 8 (a), IV Year; 9 hours per week, both terms.  
Advanced work on compounding and testing ceramic bodies and glazes.

## MINERALOGY

255. *Elementary Mineralogy*:—J. E. Thomson.  
Department 2, I Year; Department 8 (a) III Year; 2 hours per week, first term.  
After introducing the student to the chief chemical, physical, and crystallographic characteristics of minerals, the course becomes descriptive and deals with about one hundred of the minerals most important from the industrial or scientific point of view.  
Text Book:—Study of Minerals and Rocks—Rogers.
256. *Mineralogy*:—J. E. Thomson.  
Departments 6 and 8, I Year; 2 hours per week, first term; 1 hour per week, second term.  
Introduction to determination of minerals by inspection and physical tests.  
Text Book:—Mineral Tables—Eakle.

257. *Primary Mineralogy*:—A. L. Parsons.  
Department 1, II Year; 2 hours per week, first term.  
A very brief introduction to the study of minerals and rocks.  
Text books:—Study of Minerals and Rocks—Rogers; Hand-Book of Rocks—Kemp.
258. *Mineralogy*:—J. E. Thomson.  
Department 2, I Year; 1 hour per week, first term; 3 hours per week, second term.  
Department 8 (a), III Year; 1 hour per week, first term.  
Determination of minerals by inspection and by means of physical tests; introduction to blow-pipe practice.  
Text books:—Mineral Tables—Eakle; Determinative Mineralogy—Lewis.
259. *Mineralogy*:—A. L. Parsons, J. E. Thomson.  
Department 1, II Year; 1 hour per week, first term; 2 hours per week, second term.  
Determination of minerals by inspection and by means of physical tests; study of common rock types and their identification.  
Text books:—Mineral Tables—Eakle; Handbook of Rocks—Kemp.
260. *Elementary Petrography*:—T. L. Walker.  
Department 2, II Year, and Department 8 (a), III Year; 1 hour per week, both terms.  
A course of lectures and laboratory work introducing the student to the macroscopic study of rocks.  
Text books:—Handbook of Rocks—Kemp.
261. *Mineralogy*:—J. E. Thomson.  
Department 2, II Year; 2 hours per week, both terms.  
Determination of minerals by means of the blow-pipe and physical properties.  
Text books:—Mineral Tables—Eakle; Determinative Mineralogy—Lewis.
262. *General Petrography*:—A. L. Parsons.  
Department 2, III Year, and Department 8 (a), IV Year; 1 hour per week, both terms.  
Study of the chief rock-forming minerals and of some phases of petrography not covered in the course of the previous year.  
Text Books:—Minerals in Rock-Sections—Luquer; Petrology for Students—Harker.
263. *Petrography*:—T. L. Walker.  
Department 2, III Year, and Department 8 (a), IV Year; 2 hours per week, both terms.  
Study of the chief rock-forming minerals, of rocks in thin sections and in hand specimens.  
Text books:—Petrology for Students—Harker; Minerals in Rock Sections—Luquer.

# MODERN LANGUAGES

266. *French*:—J. H. Cameron, Miss J. C. Laing, L. A. Bibet.  
Required in Department 4, I and II Years; 2 hours per week, both terms; III Year, 1 hour per week, both terms.  
(a) Practice in translation of selected texts bearing on some phase of architectural study.  
(b) A course in Conversation to encourage the student to acquire a speaking knowledge of the language.
267. *German*:—B. Fairley, T. J. Hedman, G. E. Holt.  
Department 6, all years; I Year, 2 hours per week, both terms; II, III, IV Years, 1 hour per week, both terms.  
An elementary course intended to train the student in the translation of scientific journals and treatises.
268. *Spanish*:—M. A. Buchanan.  
Departments 6k, IV Year; 8, II Year; 1 hour per week, both terms.  
An introduction to Spanish grammar, pronunciation and practice in reading Engineering Spanish.

# PHYSICAL TRAINING

269. *Physical Training*:—G. D. Porter.  
Required in all departments, I and II Years, and optional in the III and IV. Years.  
By order of the Board of Governors each male student proceeding to a degree must take Physical Training in the first and second years of his attendance. In each session in which Physical Training is compulsory he must first undergo a medical examination by the Director of the University Health Service, and must then register for Physical Training at the office of the Athletic Association in Hart House. Students of all years who wish to take part in any form of athletics or physical exercise, must first undergo a medical examination by the Director. Those classified as A1 may elect to take any form of competitive athletics during the season in which that form of sport is in progress.  
Military training in the C.O.T.C. constitutes an option in Physical Training (see page 128).

# SURVEYING

270. *Surveying*:—S. R. Crerar.  
Departments 1, 2, 3, 7 and 8, I Year; 1 hour per week, both terms.  
The lecture course includes the general principles; surveying with the chain, the compass and chain and the transit and chain, and level, the applications of trigonometry to inaccessible heights and distances; mensuration of surfaces, co-ordinate surveying, division of land, etc.

Text books:—Plane Surveying—Tracy; Theory and Practice of Surveying—Johnson and Smith; Elementary Surveying—Breed and Hosmer.

**271. Field Work:**—S. R. Crerar, J. W. Melson.

Departments 1, 2, 3, 7 and 8, I Year; 6 hours per week, first term.  
This course comprises testing chains; practice in chaining; a complete survey of a piece of land with the chain and transit; keeping of field notes; the use of the transit and compass in surveying closed figures and traverse lines and in ranging straight lines; plotting by latitudes and departures, and otherwise computing areas. Instrumental work with level, including roadway improvement.

**272. Surveying:**—W. M. Treadgold, E. W. Banting.

Departments 1 and 2, II Year; 1 hour per week, both terms.

This course of lectures takes up in detail, simple, reverse and compound curves as applied to railroad surveying. It also includes stadia, plane table and photographic surveying as applied to topographic work, and the main features of mine and hydrographic surveying.

Text books:—Henck, Searles, Allen (Field books for Engineers) Theory and Practice of Surveying—Johnson and Smith; Surveying—Breed and Hosmer.

**273. Field Work:**—W. M. Treadgold, E. W. Banting.

Department 1, II Year; 9 hours per week, first term.

Department 2, II Year; 6 hours per week, first term.

This course of instruction embraces all adjustments of the transit and level, minor problems in triangulation and traversing—levelling and plane table practice.

**274. Surveying and Levelling:**—W. M. Treadgold.

Department 1, III Year; 1 hour per week, both terms.

This course of lectures takes up the work of the railroad engineer on construction, including profiles, cross sectioning, computation of volume of earthwork, overhaul, transition curves, laying out turnouts, frogs and switches, etc.

Also a discussion of trigonometric and barometric levelling.

Text books:—Field Engineering—Searles; Railroad Curves and Earth-works—Allen.

**275. Survey Camp:**—W. M. Treadgold, S. R. Crerar, E. W. Banting, J. W. Melson.

Departments 1 and 2, III Year; Department 1a, IV Year.

This course includes:

- (a) Secondary Triangulation and Base Line Measurements.
- (b) Stadia, Plane Table and Boundary Traverses.

- (c) Highway and Railway Location.
- (d) Cross Sectioning and Computation of Earthwork.
- (e) Stream Gauging and Discharge Measurements.
- (f) Hydrographic Surveying.
- (g) Photographic and Micrometer work.
- (h) Stadia and Plane Table Topography.
- (i) Mine Surveying.
- (j) Observations for Time, Azimuth and Latitude.
- (k) Geological Survey.

This work is taken at Gull Lake Camp. See page 500.

**276. *Railroad Location and Design*:—W. M. Treadgold.**

Department 1 (e), IV Year; 1 hour lecture per week, both terms; about 8 hours per week, both terms, in the drafting room.

This work will consist of an original survey for a railroad some one or two miles in length, the work to be carried out according to the most modern methods of location. Upon the completion of the field work, the complete survey will be plotted and a line adjusted to it. This will be staked out, profiles taken and the computation made of the earthwork and the preparation of overhaul diagram compiled for determination of haul and borrow. In the second term the design of track work, yards and practical problems will be taken up and special problems assigned.

### ADDITIONAL FOURTH YEAR COURSES

**280. *Sanitary Engineering*:—Peter Gillespie.**

Department 1<sub>b</sub>, IV Year; 1 hour lecture per week, both terms; 3 hours laboratory, first term; and 6 hours, second term.

Consideration is given to the problems of water supply, sewerage and sewage disposal as viewed by the engineer. Some practice in the design of works from assumed data is afforded. Excursions to places of interest are arranged from time to time.

**Reference Books:**—Public Water Supplies—Turneaure and Russell; American Sewerage Practice—Metcalf and Eddy, 3 vols.

**281. *Highway Engineering*:—A. T. Laing.**

Department 1<sub>b</sub>, IV Year; 1 hour lecture and 3 hours laboratory per week, both terms.

This course of instruction deals with the design, construction and maintenance of public highways and street pavements, also with the properties of the materials employed. Accompanying the course of lectures is a laboratory course dealing with the various bituminous and non-bituminous materials of construction. Excursions to places of interest are arranged for during the fall term.

282. *Municipal Seminar*.—P. Gillespie, A. T. Laing.

Department 1b, IV Year; 3 hours per week, both terms.

This time is devoted to reading, essay writing and discussion of problems relating to highways, transportation, town planning, sanitation and kindred subjects.

283. *Zymology*.—H. B. Speakman.

A study of the phenomena of fermentation and their industrial applications.

## THESIS

285. *Thesis*.

Required in all Departments, IV Year, with the exception of Department 4, Architectural Design Option. Department 3, IV Year; 1 hour per week, both terms.

Each student must prepare a thesis on a subject and in a form approved by the head of the department in which the student is registered.

## SCHOOL OF ENGINEERING RESEARCH

A School of Engineering Research, within the Faculty of Applied Science and Engineering, was established in the Spring of 1917 at the suggestion of the late Dean Ellis.

The School is under the direct supervision of a Committee of Management composed of fifteen Members of the Faculty Council. To this Committee is entrusted the selection of researches to be undertaken under the auspices of the School, and the disposition of funds conducting them.

The School was organized chiefly for the training of graduates in methods of research, and for the carrying out of investigations. These latter may be problems relating to specific industries or raw materials and having a specific end in view, or general problems having to do with fundamental principles.

A number of research assistants are appointed annually in the various departments of the Faculty to carry on the work of research under direction of members of the staff. The facilities of the School are also open to graduates who desire to penetrate more deeply into particular phases of experimental work, or to undertake investigations either suggested by members of the staff or arising from their own work since graduation.

Address communications to the Secretary—Professor Maitland C. Doswell, Ph.D.

## ADVANCED COURSE IN HYDRO-ELECTRIC POWER

In view of the importance of Hydro-Electric power in Canada, further facilities are offered to those graduates who wish to supplement the present extensive undergraduate courses bearing upon this subject. Graduate studies may be pursued by candidates for the Degree of Master of Applied Science as soon as desired after graduation.

To those returning after satisfactory experience in some approved phase of Hydro-Electric work, somewhat more specialized courses may be given than are possible with very recent graduates. The Engineering Alumni Association of the University has expressed its willingness and desire to assist such candidates in obtaining suitable employment to fit them for these courses of study, but such courses are available only to those with the proper undergraduate preparation.

Graduates who may wish to avail themselves of the arrangements proposed are advised to communicate with the Dean.

It should be noted that candidates for post-graduate degrees register with the Secretary of the School of Graduate Studies. For further particulars see Calendar of the School of Graduate Studies and succeeding pages of this Calendar.

REGULATIONS FOR DEGREES OF  
MASTER OF APPLIED SCIENCE, MASTER OF ARCHITECTURE,  
CIVIL ENGINEER, MINING ENGINEER, MECHANICAL  
ENGINEER, ELECTRICAL ENGINEER, CHEMICAL ENGINEER,  
METALLURGICAL ENGINEER

A. The regulations governing the Degrees of Master of Applied Science and Master of Architecture for the session 1927-28 shall be determined as follows:

1a. A candidate for the degree of Master of Applied Science shall hold the degree of Bachelor of Applied Science of this University or a degree from some other University recognized as equivalent by the Council of the School of Graduate Studies.

1b. A candidate for the degree of Master of Architecture shall hold the degree of Bachelor of Architecture or the degree of Bachelor of Applied Science in Architecture of this University or a degree from some other University recognized as equivalent by the Council of the School of Graduate Studies.

2. He shall register with the Secretary of the School of Graduate Studies at the beginning of the academic year.

3. Not later than November 1, 1927, he shall submit to the Secretary for acceptance by the Council of the School of Graduate Studies the title of his proposed thesis as approved by the department concerned.

4. Not later than April 30, 1928, he shall present evidence to the Council of the School of Graduate Studies that he has spent not less than one academic year of the department concerned as a student enrolled in one of the following departments on a course of study approved by the department: Civil Engineering, Mining Engineering, Mechanical Engineering, Architecture, Chemical Engineering, Electrical Engineering, Metallurgical Engineering.

5. Not later than April 30, 1928, evidence that the candidate has satisfactorily met all the requirements of the department with regard to thesis and to such examinations as the department shall require, shall be forwarded to the Council of the School of Graduate Studies through the sub-committee administering the regulations governing the degrees of Master of Applied Science and Master of Architecture.

B. The regulations governing the Professional Degrees of Civil Engineer (C.E.), Mining Engineer (M.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), Chemical Engineer (Chem.E.), Metallurgical Engineer (Met.E.), for the Session 1927-28 shall be determined as follows:

1. A candidate for one of the said degrees shall hold the diploma of the School of Practical Science or of the Faculty of Applied Science and Engineering or the degree of Bachelor of Applied Science.

2. He shall have spent at least three years after receiving the diploma or the degree in the actual practice of the branch of engineering wherein he is a candidate for a degree.

3. Intervals of non-employment, or of employment in other branches of engineering, shall not be included in the above three years. It shall not be necessary that the several periods requisite to make up the said three years be consecutive.

4. Notice in writing shall be sent to the Secretary not later than the first day of November, informing him of the degree to which the candidate wishes to proceed and of the title of his proposed thesis for the approval of the Examiners.

5. Satisfactory evidence shall be submitted to the University Examiners as to the nature and length of the candidate's professional experience for the purpose of clauses 2 and 3, *i.e.*, a complete and detailed history of his professional activities from the date of graduation up to the time of application, stressing particularly that part of his experience that gave rise to his desire to prepare a thesis on the subject submitted for the approval of the University Examiners; together with certificate or certificates from former employers substantiating the statements as to the nature and duration of service enumerated.

The examiners may satisfy themselves by oral or written examinations in regard to the candidate's experience and competence.



6. The candidate shall prepare an original thesis on some engineering subject in the branch in which he wishes a degree, the said thesis to be accompanied by all necessary descriptions, details, drawings, bills of quantities, specifications and estimates.

The candidate may be required at the option of the examiners to undergo an examination in the subject of this thesis.

7. The thesis, with accompanying papers, described in clause 6, shall be sent to the Secretary not later than the first day of March.

8. The candidate shall be required to present himself for examination in the month of April or at such time as may be arranged by the Examiners.

9. The thesis, drawings, and other papers submitted under clause 7 shall become the property of the University.

10. Nothing in this statute shall prevent any candidate from receiving more than one of the said degrees, provided he has the necessary qualifications for each degree. An interval of three years must elapse between the granting of any two degrees under this statute.

#### DEGREE OF DOCTOR OF PHILOSOPHY

Attention is called to the fact that the degree of Doctor of Philosophy (Ph.D.) is open to graduates of the Faculty of Applied Science and Engineering. Full information as to the conditions to be met by candidates for this degree will be found in the Calendar of the School of Graduate Studies, which may be obtained from the Registrar of the University.

In general this course involves, except under special circumstances, three years study in this University on one major subject and two minor subjects, and every possible effort will be made to meet the desires of candidates in the selection of these subjects.

Several graduates have already taken advantage of the opportunity thus offered, and others interested in this degree are requested to correspond with the Secretary of the School of Graduate Studies and are advised, in the first instance, to consult the Dean of this Faculty.

#### CERTIFICATE FOR HIGH SCHOOL ASSISTANT

The Calendar of the Ontario College of Education provides for the admission of the holder of a degree in Science to the Course for a High School Assistant's certificate. The regulation requires that the applicant shall submit with his application:

"His certificate of graduation as Bachelor or Master of Arts, Bachelor or Master of Science, Bachelor of Commerce, Bachelor of Agriculture, or Bachelor of Applied Science, from a British University, after the regular

university course approved by the Minister of Education as to entrance requirements and as to content of the undergraduate courses. Each applicant must have Upper School or Honour Matriculation standing in English and History and Mathematics or the equivalent of such standing."

#### SPECIALISTS' CERTIFICATES FOR HIGH SCHOOL TEACHERS

By an arrangement between the University and the Department of Education of the Province of Ontario, provision is made for graduates in Applied Science to obtain High School Specialists' Certificates under conditions which can be ascertained by reference to the Special Announcement of the University in connection therewith.

## LABORATORY EQUIPMENT

---

### THERMODYNAMIC AND MECHANICAL LABORATORY

The University in 1919 completed the erection of a large, well-equipped building for the accommodation of the steam, gas, mechanical and hydraulic laboratories. A more complete description of the laboratories has been published elsewhere, so that the present description is only intended to give the main features.

The part of the building set apart for thermodynamics and other mechanical work is the ground floor of a room 60 ft. x 155 ft. This room is lighted entirely from the roof in a very perfect way. A part of the space 40 ft. wide running the entire length of 155 feet is served by a 3 ton traveling crane and contains the following equipment:

50 h.p. Brown engine with separate jackets on both heads and barrel of cylinder.

Two-stage Rand air compressor having compound steam cylinders, each fitted with Meyer cut-off gear. The low pressure air cylinder has Corliss inlet gear.

30 h.p. high-speed Leonard tandem compound engine with shaft governor.

15 h.p. high-speed McEwen engine.

40 h.p. Uniflow engine.

25 h.p. General Electric steam turbine.

Two 15 h.p. Leonard engines with different types of valves, which are used for valve setting.

There are also two surface condensers with air pumps so arranged that any engine in the laboratory may be made to exhaust into the atmosphere through an open heater or into one of the condensers, the change from one arrangement to the other being accomplished in a few minutes without the aid of valves.

The laboratory further contains:

A 3 ton York refrigerating machine with tanks.

An Amsler transmission dynamometer.

Apparatus for testing injectors and steam pumps.

Hot blast heating equipment.

Numerous other pieces of apparatus and instruments.

The work on internal combustion engines and producers is performed on the following:

Experimental gas producer.

14 h.p. National gas engine arranged for various compressions and points of ignition.

10 h.p. Fielding and Platt engine for city gas or coal oil, having various adjustments

25 h.p. Allen semi-Diesel engine.

25 h.p. tractor gasoline engine.

Six cylinder Buick automobile engine.

200 h.p. Sprague electric dynamometer.

Various accessories to above machines.

Steam for the laboratory is supplied by two 50 h.p. and one 100 h.p. Babcock and Wilcox boilers, the latter having an internal superheater. These boilers are located in a separate boiler room. They are used for experimental work only and are fitted up for testing. The gases pass up through two independent chimneys, and these have been arranged so that the draft and other conditions in the chimney at any point of its height may be examined.

In smaller work-rooms off the main laboratory are placed belt and oil testing machines, apparatus for testing the efficiency of gears and machines, and for experiments in the balancing of machinery.

### HYDRAULIC LABORATORY

The hydraulic laboratory occupies two floors each 40 feet x 112 feet, which are well lighted by large windows on the side and end.

The water for the experimental work is pumped through the various pieces of apparatus from a well by means of two turbine pumping units, both of which are driven by a Belliss and Morcom compound engine of 125 h.p. running at a speed of 525 revs. per minute. Both engine and pumps have been installed with a view to using them in experimental work as well as for supply of water for other apparatus used in the laboratory.

The pumping units are capable of delivering one cubic foot of water per second against heads of 250 feet and 300 feet respectively. These units are designed and connected up so that they may be run in series giving the above discharge at 550 feet head, or they may be run in parallel giving double the discharge at a lower head. Each pumping unit consists of two two-stage pumps mounted on a common base and driven by a single pulley, and the construction and piping are such that each two-stage pump may be driven separately or that all may be driven at once, discharging separately one cubic foot per second at about 125 feet head through each of four independent pipes, or else the pumps may be run in series or in parallel. The scheme is thus well adapted to laboratory work, and under the heads used on reaction turbines about six cubic feet per second may be obtained.

In addition to this there is an electrically driven pump capable of delivering six cubic feet per second at a head of sixty-five feet and which is most helpful in turbine testing. Attention is called to the special turbine testing flume described below.

The laboratory further contains a large vertical steel tank 5½ feet diameter by 34 feet with arrangements for the attachment of nozzles

and other mouthpieces, etc. Connections are also arranged for reaction turbines, the tank acting as a reservoir.

The discharge from the turbines or nozzles is measured in a weir tank nearly 6 feet wide and 21 feet long, containing a contracted weir  $4\frac{1}{2}$  feet wide. This weir may be calibrated by two weighing tanks, each having a capacity of about 240 cubic feet.

There are three reaction turbines and two impulse wheels all ready for experiment, the power being measured by brakes and the water by weir or orifices. Amongst the reaction turbines may be mentioned the one designed and built by Escher Wyss & Co., specially for the laboratory.

A new and specially designed turbine testing flume has recently been added to the laboratory, the machinery for which has been largely furnished through the kindness of the Dominion Engineering Works, Montreal, and Wm. Cramp and Sons, Philadelphia. This flume is supplied with water by a Moody spiral pump of twelve cubic feet per second capacity and at present there are two turbines, one of the propeller type, and also two special draft tubes and more will be added. This provides an excellent opportunity for experiment and research.

Smaller orifice and weir tanks, each about  $3 \times 3 \times 12$  feet with necessary measuring tanks, are arranged for instruction in coefficients of various kinds and practice with weirs and orifices.

A Venturi meter and other meters, also an hydraulic ram and similar devices are available for testing, and good facilities have been arranged for investigating friction and other properties of pipes and fire hose.

For special investigations on turbine and centrifugal pumps, other pumps in addition to those already described have been arranged.

The basement of the laboratory contains an open trough 5 feet wide, about 110 feet long, with a large weir at one end. It is intended to use this trough for experiments on the flow in open channels, for measurements of large discharges by means of the weir, and for experiments with current meters and Pitot tubes.

Numerous pieces of smaller apparatus, together with all instruments required, have also been provided, and the laboratory equipment is believed to be very complete.

### AERODYNAMIC LABORATORY

The Aerodynamic Laboratory is located in a separate special building. The Laboratory is fully equipped with an improved 4-ft. Royal Aircraft Establishment type wind channel, aerodynamic balance, micromanometers and other necessary instruments.

Air speeds of 80 feet per second can be secured in a stream of great steadiness and uniformity and higher speeds with some sacrifice in steadiness.

The work done in the Laboratory includes the investigation of problems in aerodynamics, tests of air craft components, and complete machines, rating of meters, ventilators, radiators, etc., and the study of the effect of wind pressure on structures, chimneys, etc.

## ENGINEERING PHYSICS LABORATORIES

*Illuminating Engineering*

The laboratories are equipped with ordinary and precision photometer benches with integrating mirrors and rotators, photometric spheres from 15 inches to 6 feet, portable illuminometers, spectro-photometer, etc. A room is also provided containing outlets for various types of industrial, commercial and house lighting units, for measurement of illumination values. For work in optics there is provided optical benches for the testing of lenses and instruction in the theory of instruments together with a general equipment of telescopes, field glasses, microscopes, sextants, etc.

*Heat and Hydrostatic Laboratory*

This laboratory is equipped with a full supply of apparatus required for the practical work in these subjects.

*Acoustical Laboratory*

The equipment here consists of forks, pipes, sonometers, etc., to illustrate the general work in this subject together with special equipment for work in architectural acoustics as taught to architects.

## DONATIONS

Through the generous donations of the manufacturers of lighting equipment and accessories, a Lighting Demonstration Room to illustrate the latest practice in industrial, commercial and house lighting has been established as a permanent exhibit. The following companies have co-operated and their contributions are gratefully acknowledged:

All-American Radio Corp.  
Benjamin Electric Co.  
Bryant Electric Co.  
Canadian General Electric Co.  
Canadian Westinghouse Co.  
Consolidated Glass Co.  
Cutler-Hammer Co.  
Cutter Co. per D. M. Fraser Ltd.  
Curtis Lighting Inc.  
Frank Adam Electric Co. per Taylor Mfg. Co.  
Gleason-Fiebout Glass Co.  
Hart Mfg. Co. per Bongard Ltd., Ivanhoe Division.  
Jewell Instrument Co. per D. M. Fraser Ltd.  
Miller Co.  
Pittsburg Reflector Co. per Wilson Illuminating Co.  
Tallman Brass Co.  
Walcott Mfg. Co. per Bongard Ltd.  
Wheeler Co. per C.G.E.

## PHOTOGRAPHIC AND PROJECTION LABORATORIES

The Photographic Laboratory contains a supply of small cameras for the use of students, enlarging cameras, printers, blue printing machine and the necessary dark rooms.

This Department also carries on a photographic and projection service for all Faculties and Departments of the University. The equipment for this work consists of cameras for making photographs up to full plate size, enlargers, photo-micrographic apparatus, motion picture cameras for both gross and micro work, with the necessary developing and printing machines, a rotary blue print machine, a photostat, etc.

For projection service there is a motion picture projector and a number of projection lanterns for service in any University Building.

## ELECTRICAL LABORATORIES

The Department of Electrical Engineering is located in the Electrical Building. The accommodation includes quarters for staff, library, lecture rooms, laboratories, stores, and shop for repairs and construction.

Services.—Three-wire direct-current, 110 kw., from the University power house, automatically regulated at our end for constant voltage of desired value at our main switchboard. Three-phase, 60 cycles, 60 k.v.a., 115 volts, automatically regulated as to voltage and frequency. Three-phase, 25 cycles, 30 k.v.a., automatically regulated as to voltage and frequency. Every laboratory has all three services available at convenient places. There are three main boards, one for each floor. A system of special trunk lines between boards, and tree systems on each floor, enable easy arrangement of any desired special connections from any laboratory to any other.

Alternating current laboratory.—Area 26 x 110 ft., service sets 60 and 25 cycles, Tirrill regulators. Two 60-cycle and two 25-cycle, 15 k.v.a. motor-generator sets; converters; various motors, squirrel cage and wound rotor induction types, repulsion and other single-phase types, unity power factor motor, polyphase motor with variable speed shunt characteristics and speed range of 4 to 1; transformers, single and three-phase; constant-current transformers with load of series arc lamps; lamp racks, reactors, condensers, brakes, etc.; oscillographs; indicating, graphic, recording, and demand meters of the best makes; all arranged to facilitate a very general line of experimental work.

Direct current laboratory.—40 kw. 230 to 115 volt motor generator set with Tirrill regulator for special tests. Numerous 5 kw. to 10 kw. motor-generator sets; shunt, series, compound motors; special interpole machines; loading racks, dynamometers, rheostats, numerous meters of first quality, etc., for any sort of study.

Measurements Laboratory.—26 x 110 ft. Fitted with very flexible storage battery service which can be connected to any desired working place; d.c. three-wire service, also 60 and 25-cycle three-phase everywhere; galvanometers, resistance boxes, bridges, shunts, potentiometers, standard cells, bond testers, ductor, megger, apparatus for measuring low resistances, artificial lines for fault measurements, condensers, inductances, rails, cables, voltmeters, ammeters, wattmeters, dynamometers, etc., for general work on a great variety of measurements.

High voltage laboratory.—For various lines of study with voltages up to 200,000 volts. Flexible and safe provision for control.

Materials laboratories.—One specially fitted for general work on conducting materials, one for magnetic materials, one for dielectric materials.

Radio laboratory.—Adapted for the measurement of various quantities of interest in this work, including the strength of incoming signals. One single conductor aerial 1,000 ft. long, one multi-conductor aerial 120 ft. long.

Standardizing laboratories.—One students' calibration room for direct-current meters, another for alternating-current meters. A standards room, constant temperature, for master standards of voltage, resistance, current, power, etc.

Research laboratories.—Four rooms set apart for this work, in combination with facilities of the other laboratories.

Design laboratory.—Arranged for calculation work on apparatus selected to illustrate essential principles.

## CHEMICAL LABORATORIES

The Chemical laboratories are situated in the western half of the Chemistry and Mining building, on the first and second floors. The rooms are large and well lighted, and are supplied with the usual modern equipment.

The first and second year laboratory for qualitative work has accommodation for 112 students, each working space being supplied with water, gas and fume cupboard. The laboratory for quantitative analysis will accommodate 48 students, and is supplied with commodious fume cupboards and all necessary apparatus. A laboratory with working places for 36 is provided for the students engaged in the study of technical chemistry; it is equipped with appliances for the preparation and testing of chemical products. Laboratories for fourth year students with accommodation for twenty workers has been fitted up. Each of these laboratories has its own balance room adjoining furnished with instruments from the best makers and adapted to the particular objects in view.

In addition there are rooms set apart for research, for gas analysis, and a specially constructed fireproof laboratory for combustion, crucible and bomb furnaces. Each of these laboratories is supplied with apparatus of the most approved design, providing excellent facilities for the prosecution of work in analytical and technical chemistry.



A room in the basement, set apart for the purpose, has been equipped, as a laboratory for carrying on chemical operations on a small factory scale.

### ELECTROCHEMICAL LABORATORIES

The Electrochemical laboratories, which are situated in the Chemistry and Mining building, are provided with special facilities for electrolytic work, including a large storage battery and electroplating dynamo with tanks as well as a good set of apparatus and electrical measuring instruments. The experimental work on electric furnaces is carried out in a large furnace room in the basement, occupied jointly by this Department and the Department of Metallurgy. The equipment for this purpose comprises a 120 KW, 110 volt generator supplying direct current through a switchboard, rheostats, circuit-breaker and instruments to a set of distributing bus-bars, and a 200 KV-a transformer stepping down from 2200 volts to 30-120 volts in 3 and 6 volt steps, which supplies alternating current at 25 cycles. There is a complete set of A.C. instruments, circuit-breakers, oil-switches, relays, automatic regulating winches, etc., and a Northrup high frequency furnace with its transformer is also installed.

### ASSAYING LABORATORIES

These are situated in the west end of the basement in the Mining Building. They consist of five rooms, in addition to a library for study and an instructor's room. The East laboratory, 17 x 47 feet, and the West laboratory, 28 x 37 feet, are equipped with coal, oil, gas, and electric furnaces of various design. A Hoskin's electric resistance furnace has an automatic temperature regulator and a voltage control. Each room has a fume cupboard, and the necessary equipment for the wet work in connection with assaying. Accommodation for twenty-four students at a time is provided, by individual work desks, each supplied with a balance, weights, fluxes, tools, drawers and lockers. Common to both laboratories is the balance room which has a cement table on brick piers to support the beam balances. These are illustrative of the types met in practice. The latest model with a sensitivity of 1/500 milligram, is equipped with multiple weight attachment, and a mechanical pan extractor. Adjoining the West laboratory is a research room. A store-room adjoins the East laboratory where fluxes, clay ware and extra parts are kept. In the instructor's room are stored a large number of ores and bullion, obtained chiefly from typical mining districts and metallurgical plants, for class use. The preparation of ores is done in the Milling building, where crushers, pulverizers and sampling devices are available. A special laboratory sampler has been constructed for the purpose of giving samples for the student's assays, of indisputable similarity, thus confining variations in results to the students' work. Other apparatus includes Guess-Haultain stationary electrolytic outfits, King rotating electrolytic apparatus, microscopes, optical resistance and thermocouple pyrometers, hand and foot cupel machines, grinding plates and screens.

## MINING AND ORE DRESSING LABORATORY

A detached building 72 ft. x 70 ft. contains the Mining and Ore dressing equipment. It is heated, lighted and supplied with power from the central plant. It is divided into several parts, the larger being 72 ft x 53 ft. by 22 ft. high.

In this room is a 5-stamp battery with amalgamation plates, Wilfley table, Deister Plat-o table, Deister slime table, buddle, and classifiers of sufficient size to make tests on lots of from one to ten tons.

In addition are a set of small Wilfley tables, two 3-compartment jigs, a 2 ft. x 3 ft. tube mill, a small experimental tube mill, agitators, small classifiers and other testing apparatus for experimenting on the falling rates of ore particles, slime settling, surface tension and flotation processes. These include a Case machine, a K. and K. machine, a Ruth machine, a Callow cell, etc. Water is supplied from a tank in the roof. The machinery is all motor driven.

One portion of the room is devoted to rock drills of various types and other mining apparatus.

The other part of the building, 72 ft. x 17 ft., is divided into several rooms and contains a Hadfield's Gyratory Crusher, 16 in. x 12 in. Rolls, small crushers, screening machine, and sampling apparatus. The crushers are driven by a 30 h.p. motor in another room.

The other rooms contain a Wetherill magnetic separator, screen sets, a smelting equipment, workshop and storage for small lots of ore. The larger part of the ore supply is accommodated in bins outside the building.

The plant throughout is intended mainly for teaching and experimental purposes.

There has recently been added apparatus especially designed for research work in various phases of rock crushing and grinding:—Ball Mills with plate glass ends for the study of ball paths; a small Ball and Rod Mill on ball bearings with dynamometer; a set of high grade miniature Rolls in ball bearings with integrating dynamometer.

## METALLURGICAL LABORATORIES

This laboratory, in the East end of the Mining building, occupies about 3,600 sq. ft. on the basement floor and the same space immediately above on the ground floor. The basement floor is divided into one large furnace room, a small hydrometallurgical room and two store-rooms. The furnace room contains a motor driven Connorsville blower, several gas fired furnaces, two small blast furnaces, and a small 6 hearth Wedge roasting furnace. The larger electric furnaces of the Department of Electrochemistry are in this room. Some are supplied with direct current, others with A.C. from a 200 K.V.A. transformer. A system of flues, with hoods

over all the furnaces, leads through a Cottrell precipitator of the Rathbun type taking current at 50,000 volts, to a stack through which gases are pulled by a fan in the attic.

The hydro-metallurgical room in addition to apparatus for leaching tests contains several natural draft furnaces, a large Hoskins resistance furnace and a 113 lb. drop hammer. There are also tanks for electrolytic refining and precipitation of metals.

The upper floor is divided into laboratories, store rooms and offices. The laboratories are: 1. Metallurgical analysis; 2. Heating treatment and pyrometry; 3. Grinding, polishing and etching; 4. Metallographic room with an adjoining dark room.

In the laboratory for metallurgical analysis the student is given some training in mill and smelter methods of analysis. It is well equipped for this work.

In the heat treatment and pyrometry laboratory are a number of tube furnaces of different sizes, a Leeds & Northrup transformation point indicator with furnace, double thermocouple and twin galvanometer, a Leeds & Northrup potentiometer pyrometer, a disappearing filament pyrometer, and many thermocouples for use with galvanometer or potentiometer. For grinding and polishing there is provided two motor driven emery wheels and a set of 3 motor driven horizontal polishing plates.

The Metallographic room is equipped with the latest type Bausch & Lomb horizontal inverted microscope type of photo micrographic apparatus, an older and horizontal photo micrographic instrument made by Pellin, Paris; two vertical photo micrographic instruments and three other metallographic microscopes.

There are also a Pellin instrument for the determination of critical points by photography according to the Saladin method and a Leeds & Northrup type "K" precision potentiometer, which is also used for the determination of critical points.

The laboratory has a Rockwell hardness testing machine, and a wire drawing bench.

The Ceramic equipment includes:

A dry pan and a vertical, plug mill.

A small dry press.

A plunger machine with tile and hollow ware dies.

An Abbé six jar ball mill.

A recuperative down draft clay testing furnace of brick construction.

An oil fired muffle decorating kiln.

A small Seger test furnace.

A high temperature oxygen acetylene furnace.

Standard screens, volumeters, elutriation apparatus driers and such sundries as are necessary for clay testing.

## MECHANICS OF MATERIALS LABORATORY

This laboratory is available for the scientific and commercial testing of materials of construction such as iron, steel, timber, concrete and masonry. It is supplied with the following:

An Emery 50-ton hydraulic machine, built by Wm. Sellers & Co., of Philadelphia, for making tests in tension and compression.

A 200 ton, three-screw power testing machine, built by Richlé Bros., Philadelphia. It will make tests in tension, compression, shear and cross-bending, and will take posts 10 feet long and beams of 16 feet in span.

A Richlé 100 ton screw power universal testing machine, taking posts 12 feet long and beams of 18 ft. span.

A Richlé 10-ton screw power universal testing machine.

A Richlé 50-ton screw power universal testing machine.

A Richlé standard brick rattler.

A 15-ton single lever-machine, built by J. Buckton & Co., Leeds, England.

A torsion machine, built by Tinius Olsen & Co., Philadelphia, for testing the strength and elasticity of shafting. This machine will twist shafts up to 16 feet in length and 2 inches in diameter.

A hand power torsion machine of simple mechanical construction, specially designed for the testing of short shafts of a maximum diameter of one inch.

A Richlé transverse testing machine of 5,000 pounds capacity, adapted to specimens up to 48 inches in length.

A Richlé compressometer, with spherical seat attachment for the adjustment of specimens having slightly non-parallel faces. This compressometer will receive specimens up to 10 inches in length.

An Olsen compression micrometer of standard type.

A 20,000 pound Olsen, hand power, wire testing machine, specially fitted for testing wooden columns with both fixed and pivoted ends.

An Olsen combined tension and cantilever type impact testing machine.

An Olsen, 20,000 pound, hand power testing machine especially adapted for testing long columns.

An Olsen, 200 pound capacity, textile testing machine.

A Berry strain-gauge for spans of 2 inches and 8 inches.

A Nalder dividing engine. This may be used either for the precise division of scales or for the calibration of instruments intended for refined measurements.

A Brinell hardness testing machine.

A Shore scleroscope for testing hardness.

A Fereday-Palmer stress recorder by T. Cooke & Sons, Ltd., London.

Four Beggs deformeter gauges with necessary plugs and accessories for investigating stresses in structures by means of models.

A large number of extensometers of the usual degree of precision. These include the Bauschinger, Martens, Unwin, Ames, Richlé, Johnson, Henning

(recording) and other types. In addition there are the usual scales, micro-meters, telescopes and reflectors, voltmeters for the determination of metallic contact, and such other appliances as are necessary in the making of precise measurements.

The shop is equipped with a number of high-class machine tools specially fitted for reducing the specimens to the requisite shapes and dimensions with a minimum of hand labour. It is also supplied with the necessary appliances for making ordinary repairs and for making apparatus for special experiment and original investigation.

### HIGHWAY LABORATORY

#### ROAD METALS AND SUBGRADE SOILS

This laboratory is equipped for carrying out investigations in the various materials employed in highway construction and maintenance, and comprises the following:

Page impact machine for testing the toughness of road materials.

Diamond core drill for preparing specimens for the toughness test.

Deval abrasion machine for testing the resistance to wear of road materials.

Cementation testing apparatus (Page type) for determining cementing properties of road materials.

Jaw crusher (Mitchell type) for crushing rock for various tests.

Power driven agitator with sieves for the mechanical analysis of sand, gravel and crushed rock.

Dorry hardness testing machine for determining the hardness of rock used in road construction.

Apparatus for determining the moisture equivalent, volumetric changes, capillary moisture, dye absorption and similar properties of subgrade soils.

#### BITUMENS

This laboratory is designed for the investigation of the physical rather than the chemical properties of bitumens used in road construction and maintenance. The equipment consists of an extractor for separating bitumens and aggregates, an Engler viscosimeter, a penetration apparatus as well as appliances for determining melting point, volatilization, specific gravity, ductility, etc.

### LABORATORY OF ONTARIO BOARD OF HEALTH

Through the courtesy of the Secretary of the Provincial Board of Health for Ontario the facilities of the excellently equipped laboratory which the Board maintains at Stanley Park have, with certain conditions, been placed at the service of the University for the investigation of problems of interest to the sanitarian and the sanitary engineer. The equipment consists of various types of sewage sedimentation tank, sewage filter, sewage measuring devices, aerators, sterilizing appliances and a complete and representative plant intended for the filtration and sterilization of water by practically all known methods.

## CEMENT TESTING LABORATORY

This laboratory is fitted with all the ordinary moulds, sieves, balances, burettes, steaming and drying tanks, tables, and other appliances necessary in making the usual physical tests of a Portland cement. It is also supplied with completely equipped cabinets for individual work. In addition there are the following:

A 2,000 lb. Riehle shot machine for tension.

A 2,000 lb. Fairbanks shot machine for tension.

A 1,000 lb. Olsen automatic shot machine fitted for tests in either tension or cross breaking.

An Olsen soapstone moist closet of modern design.

## METROLOGICAL LABORATORY

The department of surveying and geodesy is provided with all the ordinary field instruments, such as transits, levels, compasses, micrometers, sextants, planimeters, plane tables, tapes, chains, etc., with which is carried on the instruction in practical field operations as detailed elsewhere.

A small laboratory is also established in the basement of the observatory described below, containing the necessary instruments for the refined measurements of geodetic surveying; as, a standard yard and metre, a Rogers 10-foot comparator, an invar base measuring apparatus, a Kater's pendulum with vacuum chamber, a level trier, micrometer microscopes, etc.

The geodetic observatory in connection with this department is used for the instruction of students of the Fourth Year in taking observations for time, latitude, longitude, and azimuth by the precise methods used in connection with a geodetic survey. It contains a 10-inch theodolite and zenith telescope by Troughton & Simms; an astronomical transit instrument and an 8-inch theodolite by Cooke; two electro-chronographs; a Howard astronomical clock; a Dent sidereal clock; a Dent sidereal break-circuit chronometer; a wireless receiving instrument; arithmometers, etc.

## GEOLOGICAL AND MINERALOGICAL LABORATORIES

In the Chemistry and Mining building on College Street the University possesses a modern laboratory for Geology and Mineralogy.

Courses are given in laboratory work, especially in personal examination of type sets of rocks, fossils, minerals and crystal models. These laboratory exercises serve to illustrate the introductory didactic instruction.

For the encouragement of pure crystallography the laboratories are supplied with goniometers of the various types, crystal models, appliances for the cutting of oriented crystal sections and for the physical examination of the same. Practical petrography is carried on in rooms provided with type sets of rocks, both macroscopic and microscopic. Advanced students are taught to make thin sections of rocks and fossils and to study them

microscopically. For students in Mining a laboratory course in the interpretation of geological maps and sections is provided. Typical mining regions are studied in detail and an opportunity is afforded for the examination of specimens illustrating economic geology.

The laboratory for the preparation of thin sections of rocks, minerals and fossils is provided with electric diamond saws and grinding appliances for the various types of work incidental to the preparation of thin sections and museum material.

A room is also provided for advanced work in cartography and geological surveying.

The departments possess 28 petrological microscopes and 5 of other types, so that it is now possible to provide advanced students with instruments and sets of thin sections for their own especial use. The blowpipe laboratory contains 156 lockers, especially designed for apparatus for students. Provision is made for the study of opaque minerals in reflected light.





---

FACULTY OF HOUSEHOLD SCIENCE

---

## DEGREE OF BACHELOR OF HOUSEHOLD SCIENCE HONOUR COURSE

### ADMISSION TO THE HONOUR COURSE

ENTRANCE REQUIREMENTS: Pass Matriculation in English, History, Mathematics, Experimental Science, and two of Greek, Latin, German, French, Italian or Spanish, †Household Science; and in addition Honour Matriculation in English, Mathematics (Algebra and Geometry), French or German, and one of a second language, History or a science.

### PASS COURSE

#### ADMISSION TO THE PASS COURSE

ENTRANCE REQUIREMENTS: Pass Matriculation in English, History, Mathematics, Experimental Science, and two of Greek, Latin, German, French, Italian or Spanish, †Household Science.

A candidate who has completed the First Year in the Faculty of Arts may enter at the Second Year.

A candidate, who presents Honour Matriculation certificates for English, French, Mathematics (Algebra and Geometry), Physics and Chemistry, and one of Greek, Latin, German, Italian or Spanish, History, Trigonometry, Botany and Zoology, may enter at the second year on payment of the prescribed fee of \$15.00.

The regulations respecting Matriculation together with a schedule of examinations which may be accepted as equivalent are to be found in the Curriculum for Matriculation.

### PROCEDURE FOR ADMISSION

A candidate for admission should apply to the Registrar of the University for a form of application for admission as soon after August 1st as possible; she should fill out this form and return it to the Registrar together with the following: (a) all Pass and Honour Matriculation or equivalent certificates which she may hold; (b) any other evidence of ability to take the work proposed; (c) certificate of good character.

Each application for admission will be considered by the Committee on Admissions, and the candidates will be notified of their decision at as

---

†This option applies to students—and to such students only—who have been in attendance at and matriculate from a Technical School in the Province of Ontario and certified as such by the Department of Education of the Province.

early a date as possible. **A candidate is strongly recommended to await the decision of the Committee before leaving for Toronto.**

Every student in attendance, proceeding to a Bachelor's degree in the Faculty of Household Science, is required to register in the University and then to **enrol with the Secretary of the Faculty.** If she desires to take any College subjects, which are offered as options, she is also required to enrol for such subjects in University College or Victoria College, or Trinity College or St. Michael's College.

Application for registration in the University, whether by mail or in person, should be made at as early a date as possible, and not later than September 10th and registration in the University together with enrolment with the Secretary and in the College must be completed on or before September 27th, 1927. **Neglect of early application will result in delay and inconvenience to the student.**

#### ADMISSION TO ADVANCED STANDING

An undergraduate of another University may be admitted to advanced standing on such conditions as the Senate on the recommendation of the Council of the Faculty may prescribe.

An applicant for admission to advanced standing must submit with her petition (1) a calendar of her University giving a full statement of the courses of instruction, (2) an official certificate of character and academic standing, (3) a certificate of honorable dismissal.

#### MACDONALD INSTITUTE

A graduate of Macdonald Institute who has complied with the entrance conditions and who has also completed the First Year of the Faculty of Arts, or its equivalent, will be admitted to such standing as should enable her to graduate from the Pass Course, with one additional year of work.

#### CANADIAN UNIVERSITIES

An undergraduate of a recognized university, who would be admitted to Third Year standing in her own university without conditions, may be admitted to the Third Year of the Pass Course, provided she has, at least, passed satisfactory examinations in Inorganic Chemistry and in Biology.

#### REGULATIONS RELATING TO STUDENTS IN ATTENDANCE

No student will be allowed to continue in attendance, whose presence is deemed by the Council of the Faculty to be prejudicial to the interests of the University.

Students proceeding regularly to the degree are required to attend the courses of instruction and the examinations in all subjects prescribed for

students of their respective standing, and no student will be permitted to remain in the University who persistently neglects academic work.

Unless special permission is granted by the Council, a student who, at the close of two sessions in the University, has failed to secure standing in her year, will not be permitted registration in the Faculty of Household Science.

The Students Administrative Council has been entrusted by the Caput with supervision of the conduct of the students, and has power, subject to the approval of the Caput, to deal with violations of the regulations governing conduct.

Any student who may be convicted of having taken part in a parade or procession through the city which has not been authorized by the police authorities after application by the Executive of the Students' Administrative Council, will be severely disciplined.

All interference on the part of any student with the personal liberty of another by arresting him, or summoning him to appear before any unauthorized tribunal of students, or otherwise subjecting him to any indignity or personal violence, is forbidden by the Caput.

A student who is under suspension, or who has been expelled from a College or from the University, will not be admitted to the University buildings or grounds.

The constitution of every University society or association of students in the Faculty of Household Science and all amendments to any such constitution must be submitted for approval to the Caput. All programmes of such societies or associations must, before publication, receive the sanction of the Caput through the President. Permission to invite any person not a member of the faculty of the University to preside at or address a meeting of any society or association must be similarly obtained.

The name of the University is not to be used in connection with a publication of any kind without the permission of the Caput.

### PHYSICAL TRAINING

Each woman student proceeding to the Bachelor's degree shall be required, during the first year of her attendance, to take Physical Training following upon an examination by the Medical Advisor for Women.

The student who has failed to complete satisfactorily the course in Physical Training prescribed for the First Year, will not be permitted to register in the Third Year.

## FEES

## FEES OF STUDENTS IN THE FACULTY OF HOUSEHOLD SCIENCE

Payable at the opening of the session at the University Bursar's Office, Simcoe Hall:

Annual fee, including tuition, laboratory, library and one annual examination, if paid in full in October..... \$100.00

## By instalments:

First instalment, if paid in October.....	50.00
Second instalment, if paid in January.....	51.00
Women Students' Administration Council.....	3.00
*Physical Training.....	4.00
**Union .....	\$10.00 or 11.00

For University College students a reduction of \$1.00 is made in the combined fee for athletics and for union, when both are paid at the same time.

---

The fees for occasional students are the same as those which are payable in the Faculty of Arts.

---

All the above fees are payable in advance. After October 31st, a penalty of \$1.00 per month will be imposed until the whole amount is paid. In the case of payment by instalments the same rule as to penalty will apply.

---

Payable on or before March 1st at the University Bursar's Office, Simcoe Hall:

Degree (final year only)..... \$10.00

---

\*Payable only in those sessions in which Physical Training is compulsory.

\*\*Students enrolled in University College may be admitted to membership in the University College Women's Union, and those who wish to avail themselves of this privilege will be required to pay a fee of ten dollars (\$10.00) for each year of such membership.

\*\*Household Science students enrolled in Victoria College, are regarded as regular undergraduate students and are required to pay to the Fees Clerk of the College an annual fee of eleven dollars (\$11.00) for membership in the Victoria College Women's Union, Wymilwood, and for certain undergraduate expenses.

## CONDITIONS FOR ACADEMIC STANDING

## PASS COURSE

To receive credit in a Pass Subject, a candidate must obtain at least fifty per cent. of the examination marks, as well as fifty per cent. of the aggregate of the term and examination marks in that subject; but where she has at one examination obtained between forty and fifty per cent. in one subject, she may be given consideration if she has obtained at least an average of sixty per cent. in the other subjects.

When a candidate fails to secure credit in a Pass subject, other than English or a Science because of a deficiency in term marks, she must either (1) earn a new term mark under conditions to be determined by the staff in the subject, and repeat the examination or (2) make up the deficiency of term marks by obtaining a corresponding increase in her examination marks.

A candidate whose term work in English is deficient, or who obtains less than fifty per cent. of the marks assigned to the term work in any one of the Sciences must obtain a satisfactory term mark under conditions to be determined by the staff concerned, and subsequently must pass a supplemental examination in the subject.

At Supplemental Examinations, fifty per cent. in each subject will be required.

A candidate who obtains an average of at least seventy-five per cent. of all the marks assigned to the \* † subjects proper to her year will be awarded Grade A standing in her course; a candidate who obtains an average of at least sixty-six per cent. will be awarded Grade B standing; and a candidate who obtains an average of at least sixty per cent. will be awarded Grade C standing.

## TERM WORK

In all subjects of the Pass Course, the ratio of term marks to examination marks will be as fifty to one hundred, except in English and the Science subjects, where the ratio is as one hundred to one hundred.

---

\*Except under special circumstances and with the consent of the Council, a student of the First Year may not claim exemption in more than two subjects, and so must attend lectures and write examinations in at least three subjects.

†In the First Year, students who write on three subjects only or less, will not be graded in the Course.

## HONOUR COURSE

A candidate who obtains at least seventy-five per cent. of the marks assigned to an Honour subject will be awarded First Class Honours; a candidate who obtains at least sixty-six per cent. will be awarded Second Class Honours; a candidate who obtains at least sixty per cent. will be awarded Third Class Honours; and a candidate who obtains at least fifty per cent. will be ranked as "Below the Line."

No candidate will be granted Honours or Below the Line in an Honour subject where term work is taken into account, unless she obtain at least fifty per cent. of the marks at the May examinations, as well as fifty per cent. of the aggregate of the term work and examination marks in that subject.

In order to secure standing in the First, Third or Fourth Year of an Honour Course, a candidate must have obtained (a) at least fifty per cent. in each Honour subject of the course as well as (b) credit in all, or all but one of the Pass subjects attached thereto.

In order to secure standing in the Second Year of an Honour Course, a candidate must have obtained (a) at least fifty per cent. in each Honour subject of the course together with an average of at least sixty per cent. in such Honour subjects, as well as (b) credit in all or all but one of the Pass subjects attached thereto. In the Session 1928-1929 this regulation will be extended to include the Third Year, and in the Session 1929-1930 the Fourth Year.

A student must obtain permission from the Council of the Faculty to make any change in the subjects of study for which she is registered.

## EXAMINATIONS

A candidate for examination is required to send an application on a printed form to the Secretary, not later than March 15th for the May examination, and not later than August 15th for the September Supplemental examination.

A fee of \$10.00 must be sent with the application for Supplemental examination.

Representations on the part of candidates with regard to the May examination and applications for consideration on account of sickness, domestic affliction or other causes, must be filed with the Secretary before May 24th.

## SCHOLARSHIPS

## THE MARION DICKENSON SCHOLARSHIP IN HOUSEHOLD SCIENCE

This scholarship of the value of \$500.00, tenable at Teachers' College, Columbia University, has been founded from a bequest of the late Miss Marion Dickenson, and will be offered in June 1928 and every second year thereafter; in case the scholarship is not awarded in any prescribed year, it may be awarded the following year and every second year thereafter.

The scholarship may be awarded to a graduate of the Faculty of Household Science who has obtained at graduation first class Honours in Household Science and who meets certain other conditions. Information may be obtained from the Professor of Household Science or from the Secretary of this Faculty.

## WAR MEMORIAL SCHOLARSHIP

The Scholarship Committee of the Alumni Federation of the University of Toronto offers one open Fellowship of *Five Hundred Dollars* in the School of Graduate Studies of the University under specified regulations. Information may be obtained from the Secretary-Treasurer of the Alumni Federation.



# PRESCRIPTION OF COURSES

## HONOUR COURSE FOR THE DEGREE OF BACHELOR OF HOUSEHOLD SCIENCE

ENTRANCE REQUIREMENTS: Pass Matriculation in English, History, Mathematics, Experimental Science, and two of Greek, Latin, German, French, Italian or Spanish, Household Science\*\*; and in addition Honour Matriculation in English, Mathematics (Algebra and Geometry), French or German, and one of a second language, History or a science.

### FIRST YEAR

English 1a, 1b, p. 21	2 hours
One of French 1a, p. 22	2 "
German 1a, p. 22	2 "
*Chemistry 1, 13, p. 19	6½ "
*Physics 28, p. 20	4 "
*Zoology 5, 6, p. 19	3¼ "
*Household Science 1a, 1b, 1c, p. 16	3¼ "
*Botany 29, p. 19.	2 "

### SECOND YEAR

Two of English 2a, 2b, p. 21	2 "
Political Economy 2e, p. 20 or Philosophy 2a, p. 20	2 "
French 2b, p. 22	2 "
*Chemistry 3, 15, part, p. 19	4 "
*Zoology 10, p. 19	2 "
*Botany 13, p. 19	2 "
*Physiology 9, p. 20	1 "
*Household Science 2a, p. 16	10 "

### THIRD YEAR

Two of English 3a, 3b, pp. 21, 22.	3 hours
Political Economy 4h, p. 21.	3 "
Philosophy (Social Ethics) 3a, p. 22	3 "
*Biochemistry 1, 3, p. 18	7 "
*Household Science 3b, p. 16	12 "
*Hygiène and Sanitation	1 "

### FOURTH YEAR

*Household Science 4b, 4c, 4d, p. 16	10 hours
*Food Chemistry 1, 2, p. 18	8 "
*One of Household Science 4e, p. 17	4 "
and Food Chemistry 3, p. 18	4 "
or Household Science (Textiles) 4f, p. 17	8 "

---

\*Honours. \*\*See p. 7.

### PASS COURSE FOR THE DEGREE OF BACHELOR OF HOUSEHOLD SCIENCE

ENTRANCE REQUIREMENTS: *Pass* Matriculation in English, History, Mathematics, Experimental Science, and two of Greek, Latin, German, French, Italian or Spanish, Household Science\*.

(For information in regard to Entrance with Advanced Standing, see p. 8).

#### FIRST YEAR

English 1a, 1b, p. 21	2 hours
One of French 1a, p. 22	4 "
German 1a, p. 22	4 "
Mathematics 1a, 1b, p. 19	2 "
General Science, I, p. 18	3 "
Household Science 1a, 1b, 1c, p. 16	5 "

#### SECOND YEAR

English 2a, 2b, p. 21	2 hours
Two of French 2a, p. 22 <i>or</i> German 2a, p. 22	3 "
Philosophy, 2a, p. 20	3 "
Political Economy 2e, p. 20	2 "
Chemistry 1, 14, p. 19	4 "
Zoology 35, p. 19	2 "
Botany 29, p. 19	2 "
Household Science 2b, p. 16	1 "

#### THIRD YEAR (1927-1928)

One of English 3a, 3b, pp. 21, 22	3 hours
Political Economy 3e, p. 20	3 "
Philosophy (Social Ethics) 3a, p. 22	3 "
Chemistry 3, p. 19	2 "
Food Chemistry 7, p. 18	4 "
Hygiene and Sanitation	1 "
Household Science 3c, p. 16	9 "

---

\*See p. 7

THIRD YEAR (1928-1929)

Botany, 27, p. 19	2, hours
Chemistry 3, p. 19	2 "
Food Chemistry, 7, p. 18	4 "
Household Science, 3c, 3d, p. 16	11 "
Hygiene and Sanitation	1 "
Physiology, 9, p. 20	1 "

FOURTH YEAR

Biochemistry 1, p. 18	3 hours
Food Chemistry 8, p. 18	6 "
Household Science 4b, 4g, pp. 16, 17	11 "

The paging in the foregoing schedules is that of the separate Household Science Calendar.

COURSES OF INSTRUCTION

HOUSEHOLD SCIENCE

1a. History of Home Life: A course of lectures one hour a week throughout the session.

1b. Household Science: A course of lectures one hour a week throughout the session.

1c. Art and Design in the Home. A course of lectures and laboratory work, throughout the session.

2a. Textiles and Household Management. A course of ten hours a week throughout the session. This includes (a) a study of textiles, (b) a study of metals, woods, etc., used in the home, and the principles underlying their care, (c) the house, (d) the home care of the sick.

2b. Household Science: A course of lectures one hour a week throughout the session.

3b. Foods and Food Values: A course of twelve hours a week throughout the session—lectures and laboratory work.

3c. Foods and Food Values. A course of nine hours a week throughout the session—lectures and laboratory work.

3d. Textiles and Household Management: A course of two lectures and one laboratory period a week throughout the session.

4b. Economics of the Household: A course of lectures and discussions two hours a week throughout the session. It includes the economics of spending, the division of the income, etc.

4c. Dietetics: A lecture course of two hours a week throughout the session and discussion periods, two hours a week.

4d. An advanced laboratory course of six hours a week throughout the session designed to illustrate the lectures in Course 4c. Each student also investigates a problem related to her work.

4e. Foods and Diet. Discussions and laboratory work, four hours a week.

4f. Textiles. An advanced course, eight hours a week.

4g. Dietetics. A course of lectures and laboratory work, nine hours a week.

#### ADDITIONAL COURSES IN THE FACULTY OF ARTS

3a. Textiles and Household Management: A course of two lectures and one laboratory period a week throughout the session.

4a. Foods and Food values: A course of two lectures and one laboratory period a week throughout the session.

#### COURSE IN THE DEPARTMENT OF PUBLIC HEALTH NURSING

5. A lecture course in nutrition and dietetics; family budgets are also discussed.

Occasional Work: Under certain conditions, occasional students may be admitted to Courses 3a and 4a.

Graduate Work: Opportunities are offered in the laboratories to graduate students who desire to engage in research work.

Laboratory deposit fee: a deposit of three dollars (\$3.00) is required of each student taking laboratory courses. This amount, minus the cost of equipment and apparatus destroyed, will be returned at the end of the session.

Books of reference: FRIEDENWALD AND RUHRÄH, *Diet in Health and Disease*; CARTER, HOWE AND MASON, *Nutrition and Clinical Dietetics*; FITCH, *Dietotherapy*; SHERMAN, *Chemistry of Food and Nutrition*; LUSK, *Science of Nutrition*; WHEELER AND WHEELER, *Dietetics and Dietotherapy*; GRULEE, *Infant Feeding*; HESS, *Principles and Practice of Infant Feeding*; SHERMAN AND SMITH, *The Vitamins*; BAILEY, *Source, Chemistry and Use of Food Products*; SHERMAN, *Food Products*; TIBBLES, *Foods, their Origin, Composition and Manufacture*; LEACH, *Food Inspection and Analysis*; WILEY, *Foods and Their Adulteration*; WELD, *Marketing of Farm Products*; MCKILLOP AND ATKINSON, *Economics*, *American Academy of Political and Social Science*, *Cost of Living*; LEEDS, *The Household Budget*, ABEL, *Successful Family Life on a Moderate Income*; CAMPBELL, *Household Economics*; RICHARDS, *Cost of Living, Cost of Shelter*; TINKLER AND MASTERS, *Applied Chemistry*, Vol. I; SNELL, *Elementary Household Chemistry*; WOOLMAN AND MCGOWAN, *Textiles*; MCGOWAN AND WAITE, *Textiles*; DOOLEY, *Textiles*; DYER, *Textile Fabrics*; BALDERSTON, *Laundering*; MARSH, *Laundry Work*; BALDERSTON, *Housewifery*; CLARK, *The Care of a House*; VAN RENSSELAER, ROSE AND CANON, *Manual of Home Making*; AIKENS, *Handbook of Practical Nursing*; MAXWELL AND POPE, *Practical Nursing*; DOW, *Composition (Art and Design)*; Government Bulletins; *Journal of Biological Chemistry*, *Journal of Home Economics*.

# FOOD CHEMISTRY

## HONOUR COURSES

1. A course of lectures, two a week, on the Chemistry of Foods and Nutrition.
2. A laboratory course on the Chemistry of Foods. Six hours a week.
3. An advanced laboratory course on the Chemistry of Foods and on problems of Nutrition, with discussion of supplementary reading.
4. Research work on Food Chemistry and Metabolism.

## PASS COURSES

7. Elementary Food Chemistry. Lectures and laboratory work on the chemistry of food constituents; and on the chemistry and analysis of a few typical foods. Four hours a week.
8. Elementary Food Chemistry. A continuation of Course 7, including quantitative methods of food analysis and elementary study of metabolism. Six hours a week.

## ADDITIONAL COURSES IN THE FACULTY OF ARTS

5. Chemistry of Food Constituents. Laboratory work for pass students of the Third Year. Two hours a week.
6. Composition of Foods. Chemistry of foods with laboratory work in Qualitative and Quantitative Analysis. Lectures and laboratory work for pass students of the Fourth Year. Four hours a week.

Text-books and works of reference include: WINTON, *Food Analysis*; LEACH, *Food Inspection and Analysis*; LUSK, *Science of Nutrition*; SNYDER, *Human Foods*; HALLIBURTON, *Essentials of Chemical Physiology*; Canadian and American bulletins on the chemistry of foods.

---

THE FOLLOWING COURSES IN THE FACULTY OF ARTS ARE ALSO AVAILABLE:

## BIOCHEMISTRY

1. A course of lectures in General Biochemistry; three hours a week.
3. A laboratory course in General Biochemistry; four hours a week.

## BIOLOGY

1. General Science: A course of seventy-five lectures on the general principles and applications of science. This is a co-operative course, given by members of the departments of Physics, Chemistry, Geology, Botany and Zoology.

5. Elementary Zoology: A course of two lectures a week throughout the Easter term on the nature, structure and classification of animals. For Honour Science students.

6. Elementary Zoology: A laboratory course of seventy-five hours on the general structure of the animal body, its organs and tissues and their functions; principles of adaptation, specialization, and homology, based on selected types. Text-books: HEGNER, *College Zoology*. For reference: PARKER AND HASWELL, *Text-book of Zoology* (e).

10. A course on mammalian anatomy and histology. For Household Science students (m).

35. A course of general biological principles and on vertebrate anatomy (m).

### BOTANY

13. Microbiology; an elementary course on the morphology and physiology of Bacteria, Yeasts and Molds for Household Science students. For reference: BUCHANAN, *Household Bacteriology*; MARSHALL, *Microbiology*; SAVAGE, *Bacteriological Examination of Food and Water*; CONN, *Bacteria, Yeasts and Molds in the Home*; TANNER, *Bacteriology and Mycology of Foods*; GUILLIERMOND-TANNER, *The Yeasts*; HEINEMANN, *Milk* (e).

27. Microbiology: An introduction to the elements of Microbiology with particular reference to the preparation and preservation of food materials. For reference: BUCHANAN, *Bacteriology*; JONES, *Bacteria—Friends and Foes*; SAVAGE, *Bacteriological Examination of Food and Water*; TANNER, *Bacteriology and Mycology of Foods*.

29. Elementary Biology. A lecture and laboratory course on fundamental biological principles, based on a study of plants. Four hours a week for one term.

### CHEMISTRY

1. Elementary Chemistry: An introductory course in general chemistry with experimental illustrations. Two lectures a week.

3. Elementary Organic Chemistry: A course of experimental lectures on the systematic classification of the aliphatic compounds and some of the more common aromatic compounds. Two lectures a week.

13. Elementary quantitative chemistry.

14. Elementary quantitative chemistry (shorter course).

15. Analysis, chemical mechanics and organic preparations. Four hours a week.

### MATHEMATICS

1a. Algebra: Simple equations of one, two and three unknown quantities; quadratic equations of one and two unknown quantities; elementary treatment of variation, proportion and progressions; interest forms and

annuities. Text-book: DELURY, *Intermediate Algebra*. One hour a week.

1b. Analytical Geometry: A course in elementary analytical geometry of two dimensions, establishing the more important properties of the conic sections. Text-book: BAKER, *Analytical Geometry for Beginners*. One hour a week.

## PHILOSOPHY

2a. Introductory Course. (i) Logic. A course on the place and function of Reason in experience according to (a) the biological classification of functions, (b) the Aristotelian method, (c) idealistic construction of experience; the status of the Person in relation to Nature and Society (typical historical views); common sense and the conditions of scientific method: the basal concepts of the natural sciences, law, cause and effect, space, time, evolution; the distinction between normative and descriptive sciences; analysis of the validity and utility of this distinction in reference to the problem of social values and their objectivity. Two hours a week. (ii) Introduction to Ethics. The basis of morals in human nature; the influence of heredity and environment; standards, motives and sanctions of conduct; applications to the problems of personal conduct and social relations. One hour a week.

## PHYSICS

28. A course of lectures and laboratory work, specially designed for students taking a one-year course in Physics. Text-books: BROWN, *Experimental Science, Physics*; DUNCAN AND STARLING, *Light and Sound*; HUTCHINSON, *Intermediate Electricity and Magnetism*.

## PHYSIOLOGY

9. Elementary lectures on the principles of human physiology.

## POLITICAL ECONOMY

2e. General Introduction to the Study of Economics. For pass students Elements of Economic Theory, Sketch of Economic History, and of important social changes and movements. Books recommended: TAUSSIG, *Principles of Political Economy*; CARVER, *The Distribution of Wealth*; ROBERTSON, *Control of Industry*; WITHERS, *Meaning of Money*. Two hours a week.

3e. Economic Theory. Books recommended: ADAM SMITH, *Wealth of Nations*; MALTHUS, *Essay on Population*; RICARDO, *Political Economy*; MILL, *Principles of Political Economy*; CANNAN, *Theories of Production and Distribution*; MARX AND ENGELS, *The Communist Manifesto*; GIDE AND RIST, *History of Economic Doctrines*; DAVENPORT, *Value and Distribution*; LEVINSKY, *The Founders of Political Economy*; SPARGO, *Socialism*. BAS-

TABLE, *Public Finance*; STAMP, *Principles of Taxation*; SELIGMAN, *Essays in Taxation*. Three hours a week.

4k. A General Sketch of Economic History. For pass students. Books recommended: ASHLEY, *Economic Organization of England*; KNOWLES, *Industrial and Commercial Revolutions in Great Britain during the 19th Century*; FAY, *Life and Labour in the 19th Century*; BOGART, *Economic History of the United States*. Three hours a week.

#### INSTRUCTION IN THE FOLLOWING SUBJECTS IS GIVEN IN THE COLLEGES

A student, selecting any of these subjects, as an option in her course, is required to enrol in University College, Victoria College, Trinity College or St. Michael's College.

#### ENGLISH

1a. Composition: The writing of at least four original compositions during the session.

1b. Familiarity with and intelligent appreciation of the following texts: *Sir Patrick Spens*, *Edward, The Braes o' Yarrow, Waly Waly*; POPE, *Rape of the Lock*; THOMSON, extracts from *Summer and Winter*; GRAY, *Spring, Eton College, Elegy*; GOLDSMITH, *Deserted Village*; BURNS, *Address to the De'il, To John Lapraik, To a Mouse, Tam o' Shanter, Last May a Braw Wooser, A Man's a Man for a' that*; WORDSWORTH, *Sonnets*; SCOTT, *Rosabelle, Brignall Banks, Lochinvar, Old Mortality*; KEATS, *On Chapman's Homer, "Bright Star would I", The Eve of St. Agnes, On a Grecian Urn, To a Nightingale, To Autumn*; BROWNING, *Fra Lippo Lippi, The Bishop orders his Tomb, An Epistle*, RUSKIN, *The Crown of Wild Olives* (Preface, *Work, Traffic*); HUXLEY, *A Piece of Chalk*; ARNOLD, *The Study of Poetry*; BRYCE, *University Instruction*; HARDY, *The Return of the Native*; selections from Canadian and recent British poetry. [The poetical selections in this paragraph are contained in *Representative Poetry*, and *An Anthology of Modern Verse* (Methuen).] Two hours a week.

2a. Composition: The writing of at least four original compositions during the session.

2b. SHAKESPEARE, with special study of *Romeo and Juliet, Henry IV, Parts I and II, Hamlet, Anthony and Cleopatra, The Tempest*. Two hours a week.

3a. The writing of essays on subjects connected with one of the Third Year courses in literature.

3b. (i) Eighteenth century literature with special study of the following texts: DEFOE, *Robinson Crusoe*; SWIFT, *Gulliver's Travels*; ADDISON, *Select Essays* (edited by J. R. Green, Macmillan); JOHNSON, *Preface to Shakespeare, Lives of Addison and Pope*; FIELDING, *Tom Jones*; GOLDSMITH, *The Vicar of Wakefield*; BOSWELL, *Life of Johnson* (May 16, 1763—end of



1764; April 3, 1773—end of May, 1773; March 21, 1775—May 21, 1775); BURKE, *Reflections on the French Revolution*; THACKERAY, *Esmond*; the selections from SWIFT, POPE, BURNS, BLAKE, CRABBE in *Representative Poetry*. (ii) MILTON, *selections in Representative Poetry, Areopagitica*. Three or two hours a week.

### FRENCH

1a. Grammar; dictation; translation from English into French; translation at sight from modern French. Four hours a week.

2a. Grammar; dictation; translation from English into French; translation at sight from modern French. Three hours a week.

2b. Study of texts and sight work of scientific nature. Two hours a week.

### GERMAN

1a. Grammar; dictation; pronunciation; translation from modern German; translation from English into German. Four hours a week.

2b. Reading of prescribed texts in scientific German; translation of scientific German at sight. Two hours a week.

### PHILOSOPHY

3a. Social Ethics; The study of social conditions and problems in their ethical aspects. (1) History of moral ideas and customs; the process of ethical development in early society; Greek ethics, with special reference to the social and political ethics of Plato and Aristotle, and including the later Greek systems (Stoic and Epicurean); the influence on world civilization of Greek, Hebrew, Roman and early Christian moral and social ideals. (2) Theory of morals; the leading problems of moral philosophy and typical proposed solutions. (3) Social problems; the ethical aspects of modern economic, political and social conditions. Prescribed texts: SETH, *Ethical Principles*; selections from PLATO, *Republic*; ARISTOTLE, *Nicomachean Ethics and Politics*. References: DEWEY AND TUFTS, *Ethics*; DRAKE, *Problems of Conduct*; BAKEWELL, *Source Book in Ancient Philosophy*; MYERS, *History as Past Ethics*; ROGERS, *Short History of Ethics*; TOWNE, *Social Problems*. Three hours a week.



---

THE ONTARIO COLLEGE OF EDUCATION

---

## THE ONTARIO COLLEGE OF EDUCATION

### GENERAL INFORMATION

The Ontario College of Education is the University's professional school of education. It trains candidates for diplomas and certificates as teachers and in particular for Provincial certificates as teachers of Art, Household Science, Physical Education and Commercial Subjects, as High School Assistants and Specialists and as First Class Public School teachers. It also offers courses for the B.Paed., D.Paed., M.A., and Ph.D. degrees.

The buildings of the Ontario College of Education on Bloor Street contain lecture-rooms, laboratories, and reading-rooms for the accommodation of the students, and model class-rooms for observation and practice-teaching. So far as necessary the observation and practice-teaching are supplemented by observation and practice-teaching in schools in the City of Toronto.

While the chief exercises of the Ontario College of Education will be conducted in the buildings on Bloor Street, the students may use the University's library, gymnasium, and athletic fields, and Hart House, under such conditions as obtain with other students. They will also be admitted free to the Royal Ontario Museum, Bloor Street, from 9 a.m. to 5 p.m., on presentation of their registration cards.

### BOARD AND LODGING

The Secretary of the Ontario College of Education will forward accredited lists of boarding-houses on request.

### COURSES

The following courses are offered:

I. Courses for (1) Interim High School Assistants' and High School Specialists' certificates with Interim First Class Public School certificates or Elementary certificates in Physical Education and Art, (2) Ordinary certificates as teachers of Household Science.

II. Courses for the B.Paed. degree.

III. Courses under the School of Graduate Studies for the degrees of D.Paed., M.A. and Ph.D.

## I.

COURSES FOR INTERIM HIGH SCHOOL ASSISTANTS' AND HIGH SCHOOL SPECIALISTS' CERTIFICATES WITH INTERIM FIRST CLASS PUBLIC SCHOOL CERTIFICATES OR ELEMENTARY CERTIFICATES IN PHYSICAL EDUCATION AND ART, AND FOR ORDINARY CERTIFICATES AS TEACHERS OF HOUSEHOLD SCIENCE.

## SESSIONS

1. Enrolment in classes of the regular session will begin Tuesday, September 27th, and the instruction will begin September 28th, at 10 a.m. The Autumn Term will end December 21st, at 1 p.m., and the Easter Term will begin January 4th, at 9 a.m. The Spring Term will begin April 16th and end June 15th.

## DUTIES OF STUDENTS

2. (1) Regular attendance on the part of candidates for Provincial certificates is indispensable, except for such as are exempt from attendance under the regulations of the Department of Education, and for such as are permitted by the Dean to act, after Christmas, for not more than a total of one fortnight, as substitute teachers in the schools of Ontario. A return of the attendance of each student will be made to the Minister of Education at the close of the session.

(2) Students whose class-work shows them to be unduly deficient in scholarship, or whose conduct or progress is unsatisfactory, may be dismissed from attendance by the Dean at any time during the session.

(3) On the Dean's report to the Minister of Education as to the physical unfitness of a student for training for a Provincial certificate as a teacher, the Minister may require a special medical examination of such student, and, as a result thereof, may direct that his registration for such training be cancelled.

(4) Various religious, athletic, literary and dramatic associations are formed each session. For professional improvement all students are required to share in the activities of the literary and dramatic associations.

## APPEALS

3. The answer papers of the final examinations of all unsuccessful candidates for Provincial certificates are re-read by the examiners, and the results of the first reading reconsidered before a decision to reject is reached. Despite this fact any unsuccessful candidate may have his case

considered a third time if within two weeks after the announcement of the results he lodges with the Minister of Education his appeal, with a statement of the grounds on which it is based, and with a fee of \$2.00. If made within the two weeks following, the fee will be \$5, and no appeal will be entertained thereafter. The fee will be refunded if the appeal is sustained.

#### THE UNIVERSITY OF TORONTO WAR MEMORIAL SCHOLARSHIP

4. Two Scholarships of the value of two hundred dollars each have been established by the Alumni Federation of the University from the War Memorial Fund to be awarded to a student in the Ontario College of Education.

The general basis on which the above scholarships may be awarded are as follows:

- (a) Standing in course of studies.
- (b) Need of assistance.
- (c) Merit as shown in extra-academic activities—executive, literary, dramatic, athletic, etc.
- (d) Relationship, if any, to active service during Great War.

Information regarding this scholarship may be obtained from the Secretary-Treasurer of the Alumni Federation, Room 225, Simcoe Hall, to whom applications for the same must be made not later than January 15th.

# COURSE FOR INTERIM HIGH SCHOOL ASSISTANTS' CERTIFICATES.

## CONDITIONS OF ADMISSION

5. (1) Except as provided in (2) and (3) below, an applicant for admission to the course for an Interim High School Assistant's certificate should make application not later than September 27th, to the Secretary of the Ontario College of Education on a form to be obtained from him and should submit with this application, on official forms also to be supplied by the Secretary:

(a) A certificate from the Deputy Registrar-General of Births, Parliament Buildings, Toronto, or an affidavit by one of the parents or other relative, or other person cognizant of the fact, that the applicant will be at least 20 years of age before October 1st, 1927.

(b) A certificate from a clergyman or other competent authority that he is of good moral character.

(c) A certificate from a duly qualified medical practitioner that for the purposes of this certificate he has made a careful examination of the applicant, and certifies as follows: (i) that he is free from heart disease or any other serious organic affection; (ii) that he is free from pulmonary affection, defective hearing, or seriously defective eyesight, or abnormal conditions of appearance which would interfere with his work as a teacher; and (iii) that in other respects also he is physically able for the work of a teacher as prescribed in the courses of study of the Ontario College of Education and of the Provincial Schools represented in the certificate for which he is a candidate. (See also Section 2 (3)).

(d) An agreement, if successful in obtaining a teacher's certificate, to teach thereon in Ontario, for at least the first year of his subsequent teaching experience.

NOTICE.—*A violation of this agreement will render the certificate invalid.*

(e) A certificate from a competent authority that he is a British subject.

(f) His certificate of graduation as Bachelor or Master of Arts, Bachelor or Master of Science, Bachelor of Commerce, Bachelor of Agriculture, or Bachelor of Applied Science, from a British university, after a regular university course approved by the Minister of Education as to entrance requirements and as to content of the undergraduate courses. Each applicant must have Upper School or Honour Matriculation standing in English, History and Mathematics or the equivalent of such standing.

(2) An applicant for admission to this course who is not a candidate for the certificate of the Ontario Department of Education must comply

COURSE FOR INTERIM HIGH SCHOOL—*Cont.*

with such conditions of admission as the Council of the Ontario College of Education may determine.

(3) Applications for admission to the examinations by students not in attendance at the regular session, should be made, at least one month before the examinations begin, to the Secretary of the Ontario College of Education, University of Toronto, on an official form to be obtained from the Secretary.

6. The annual fee for the Course for Interim High School Assistants' certificates, which includes the library and examination fees, is \$25.00. The fee for the examination in the Course for Interim High School Assistants' certificates when the examination is taken by students not in attendance, will be \$15.00, or \$10.00 for Part I and \$5.00 for Part II, or in the case of partial examination, \$2.00 per subject. The fee for the University diploma will be \$2.00. A library deposit of \$1.00 will be required of all students, and a fee of \$8.00 for membership in Hart House of all male students. All students will be required to become members of the respective Students' Administrative Councils, and the women students who take the classes in Physical Culture to become members of the Women's Athletic Association.

## TEXT-BOOKS

7. The text-books for the academic work are those prescribed for the Lower and Middle Schools of the High Schools of Ontario in each subject of the student's course.

For Observation and Practice-teaching students should supply themselves with copies of all necessary school text-books. They should also supply themselves with the professional text-books whose titles appear in *italics* in the lists given below under each subject.

## PROGRAMME OF STUDIES

8. (1) The course of training for Interim High School Assistants' certificate consists of two parts as follows:

Part I: The Science of Education, School Management and Law, English, History, Geography, and (a) Latin, and French or German or Spanish or Greek or (b) Mathematics and Science.

Part II: *Observation and Practice-teaching.*

(2) Students in attendance in the Interim High School Assistants' course may also take the course in Vocal Music, and, if they possess the required academic qualifications, a Specialist's course, and *must* also take *either* the course for the First Class Public School certificate *or* the course for the Elementary certificate in Physical Education *or* the course for the Elementary certificate in Art.



COURSE FOR INTERIM HIGH SCHOOL—*Cont.*

ORGANIZATION OF COURSE

9. (1) The following introductory work will be taken up at the beginning of the session.

(a) About 20 lectures upon the General Method of the Recitation in the Science of Education.

(b) Supervised Observation and Practice lessons (about 10 of each) in the different grades or forms of the High Schools.

(2) The instruction in the special methodology of the subjects of the High School courses will be accompanied by a review from the academic standpoint of such portions of each subject as may be necessary to determine the scholarship of the students and to illustrate the methods of instruction in that subject, dealing in particular with those parts of the course that are difficult of presentation.

(3) So far as the conditions permit the programme of instruction will be organized on the basis of intensive study of a few subjects at a time.

(4) (a) The lectures will be distributed among the various prescribed subjects approximately as follows: The Science of Education 100, School Management and Law 60, English 90, History 20, Geography 15, Mathematics 90, Latin 50, French or German or Spanish or Greek 50, Science 50, Vocal Music 30.

(b) The courses in Mathematics, English, and Vocal Music will begin at the opening of the session and will continue until the close; those in the other subjects will be given, as far as practicable, in correlation with the Observation and Practice-teaching and will continue until completed.

(c) The Observation work will begin in the third week of the session, and the Practice-teaching in the fifth week. Exclusive of the introductory work, the programme of instruction will include for each student at least 50 Observation lessons and 30 Practice-teaching lessons. These numbers may be increased to meet the needs of individual students.

OBSERVATION AND PRACTICE-TEACHING

10. (1) The introductory course defined herein will be followed by systematic Observation and Practice-teaching, under the general supervision of the lecturers in the Ontario College of Education.

(2) (a) The Observation and Practice-teaching lessons for each student will be arranged to represent as far as practicable the work in all forms and grades of the Lower and Middle Schools of the High Schools. There will also be Observation in the Upper School of the High School.

COURSE FOR INTERIM HIGH SCHOOL—*Cont.*

(b) So far as practicable continuous Practice-teaching for several periods will be required, the students being wholly responsible for the management of the classes.

(3) Students will be notified of the subject and scope of the Observation lesson, and should prepare the lesson beforehand. After observing the lesson they will discuss it with the teacher or lecturer concerned.

(4) Students will be notified of the subject and the scope of the practice-teaching lesson by the teacher concerned, and will prepare a plan of each Practice-teaching lesson for submission to the teacher.

(5) (a) Model lessons will be taught by the teachers of the practice-schools in accordance with the regular programme of said schools.

(b) The lecturers of the Ontario College of Education will develop the details of their subjects in the teaching order, and, after each suitable step, will also themselves teach model lessons in special classes and in the practice schools.

(6) (a) The necessary applications of the Science of Education and of Special Methods will be made systematically in connection with the Observation lessons and the Practice-teaching; so that the course may be taken up in terms of the pupil's mind and growth. Throughout the course the instructor in the Science of Education will himself illustrate by actual teaching the principles he has discussed in class.

(b) As far as practicable, the lecturers of the Ontario College of Education will be present at the Observation lessons and Practice-teaching of the students and will make jointly the criticism and valuation of their work.

## EXAMINATIONS

II. (1) For the purpose of determining the final standing of students the courses are classified into the following subjects:

Part I: Science of Education, School Management and Law, English, History, Mathematics, Geography, Latin, French, German, Spanish, Greek, Science, Vocal Music.

Part II: Observation, Practice-teaching.

(2) (a) The final standing of students in attendance will be determined by the combined results of the sessional records and the records of the final examinations in the subjects of Part I, and by the results of the records of the Observations and Practice-teaching of Part II.

(b) The sessional records represent oral and written exercises, practical work, practice in making examination papers, and in valuing the answer-papers of pupils, and such other tests as the staff may prescribe.

COURSE FOR INTERIM HIGH SCHOOL—*Cont.*

(c) At the close of each term there will be final examinations in such courses of Part I as have been completed in the term.

(d) At the examinations in Part I, each paper will contain questions in methodology, based upon the academic subjects, which will test the candidate's academic knowledge and, if his sessional records and his answers to these questions show that his academic knowledge is defective, he will be rejected on this ground alone.

(e) The maximum marks assigned to each subject in Part I will be 100. In all subjects except Vocal Music, a maximum of 40% of the marks will be assigned to the sessional records and 60% to the final written examinations. In Vocal Music a maximum of 50% of the marks will be assigned to the sessional records and 50% to the final written examinations.

(f) A maximum of 800 marks will be assigned to Practice-teaching and of 400 to Observation. The standing of the student in Observation and in Practice-teaching will be based upon his sessional records in the lessons following those which form part of the introductory courses.

## CERTIFICATES

12. (1) A student who obtains 50% of the marks in each of the required subjects of Part I and 60% of the aggregate of the marks in each of the divisions of Part II, may, on the recommendation of the examiners, be awarded by the Minister of Education, an Interim High School Assistant's certificate.

(2) A student who passes in Part II and fails in not more than two of the obligatory subjects of Part I will be exempted from further attendance.

(3) All other students who have failed to obtain the necessary final standing will be required to attend another session, beginning after the Christmas vacation.

(4) (a) (i) Candidates who are exempted from attendance at the Ontario College of Education, as provided in (2) above, may complete their standing for a certificate by re-writing, at one annual examination, or, separately, at different annual examinations, the examination in the subject or subjects in which they failed.

(ii) Candidates who failed at an examination under former Regulations and who were exempted from subsequent attendance at the Ontario College of Education will take, not later than a date determined in each case by the Minister of Education, the final examination papers as prescribed herein but their standing will be determined in the subjects as constituted under the Regulations in force when they first wrote.

COURSE FOR INTERIM HIGH SCHOOL—*Cont.*

(iii) Candidates who have been exempted by the Minister of Education from attendance at the Ontario College of Education on account of equivalent training in other provinces or countries, and who are required to write on the final examinations of the Ontario College of Education will take the prescribed final examinations in the subjects of Part I, and will also satisfy the examiners by teaching and other tests that they are competent for the work in the subjects covered by the certificate for which they are candidates.

(b) (i) The pass standard for candidates exempt from attendance will be the same as that for candidates in attendance but no allowance will be made for sessional work, if any, in the case of candidates not in attendance.

(ii) The final examinations in Vocal Music for students exempt from attendance, will include both a practical and a written test, 50 marks being assigned to the written test and 50 to the practical test.

(c) (i) Candidates exempt from attendance shall take their practical tests in Part II at such times during the session as may be agreed upon with the examiners, but not later than May 15th. They shall take their examinations in the subjects of Part I in June on dates to be determined by the examiners or, in part, in June and, in part, at such times during the session as are set apart for the examination of students in attendance.

(ii) Students exempt from attendance may take their written examinations in Part I at Toronto, or at such local centres and under such conditions as may be determined by the Senate. They must, however, take their practical tests in Vocal Music, and in Teaching at Toronto.

(5) (a) Candidates who hold First Class Public School certificates, with the academic standing required for admission to the High School Assistants' Course and who submit certificates of at least one year's successful experience in a Continuation School from the Inspector or Inspectors under whom they have taught will be exempted from the attendance, excepting for the Spring Term, but will take the final examinations prescribed for Part I, and must also satisfy the examiners by practical tests that they are able to teach the subjects of the High School courses.

(b) Other candidates who hold a First or a Second Class certificate with the academic standing required for admission to the High School Assistants' Course will be exempted from attendance during the Autumn Term, but will take the final examinations prescribed for Part I and must also satisfy the examiners by practical tests that they are able to teach the subjects of the High School courses.

## DIPLOMAS

13. Successful candidates who are awarded High School Assistants' certificates by the Minister of Education and such other successful candidates as may be admitted to the course under section 5 (2), may be awarded University diplomas.

## COURSES FOR HIGH SCHOOL SPECIALISTS' CERTIFICATES.

### CONDITIONS OF ADMISSION

14. (1) Applicants for admission to the courses for Interim High School Specialists' certificates, or to the final examinations for said certificates, must also be applicants for admission to the courses for Interim High School Assistants' certificates, or must be applicants for admission to the examinations therefor without attendance throughout the session, or must already hold High School Assistants' certificates. No candidate will be awarded an Interim High School Specialist's certificate or receive credit towards said certificate *before* he has been awarded an Interim High School Assistants' certificate.

(2) (a) A candidate for an Interim High School Specialist's certificate who is also a candidate for admission to the course for an Interim High School Assistants' certificate, must comply with the conditions for admission prescribed for candidates for Interim High School Assistants' certificates, and must also have his academic standing as a specialist approved by the Minister of Education before he will be admitted to said specialist course or to the examinations for the specialist certificate.

(b) A candidate for an Interim High School Specialist's certificate who holds a High School Assistants' certificate, must have his academic standing as a specialist approved by the Minister of Education before he will be admitted to the examinations for the specialist certificate.

### FEEs

15. When an Interim High School Specialist Course is taken concurrently with the Course for an Interim High School Assistants' certificate, or when an Interim High School Specialist examination is taken concurrently with the examination for an Interim High School Assistants' certificate, there is no additional fee. The fee for a specialist course or examination, one or both, taken apart from the course or examination for an Interim High School Assistants' certificate, will be \$5.00 per course or per examination, one or both, as the case may be.

### COURSES

16. (1) Courses will be offered for Interim High School Specialists' certificates in Agriculture, Classics, Commerce, English and French, English and History, French and German, French and Spanish, Mathematics, Mathematics and Physics, Moderns and History, Science, Household Science, and Physical Education.

COURSES FOR HIGH SCHOOL SPECIALISTS—*Cont.*

(2) Each specialist course will consist of at least two seminar-periods per week throughout the session, and of special Observation and Practice-teaching in the specialist department in which the candidate is an applicant for a certificate.

## TEXT-BOOKS

17. Students in the courses for High School Specialists' certificates will supply themselves with such special professional text-books as may be recommended by the instructors from the lists given under the details of each course. The other books and journals, whose names appear in these lists, may be consulted in the library of the Ontario College of Education.

## EXAMINATIONS

## SUBJECTS AND STANDARDS

18. (1) Subject to the condition that no student may be awarded an Interim High School Specialist's certificate who does not already hold or is not also awarded an Interim High School Assistants' certificate, the final standing of students in attendance in a specialist course will be determined by the records of the Observation and Practice-teaching in the department or subject concerned, and by the combined results of the sessional records and the records of the final examinations in the same department or subject. The sessional records represent oral and written exercises, practical work, practice in preparing examination papers, and in valuing the answer-papers of pupils, and such term work as the instructors may prescribe. The records of the final examinations will be based upon two examination papers taken in each department at the close of the session. The maximum marks represented in the Observation and Practice-teaching will be 100; in the sessional records 40; and in the final written examinations of the department or subject 60.

(2) The final standing of students not in attendance will be determined by the final written examinations and by teaching in the department concerned. For this purpose the maximum of marks in each case will be 100.

## CERTIFICATES

19. (1) On the recommendation of the examiners the Minister of Education may grant Interim High School Specialists' certificates to students in attendance who have fulfilled the conditions of the course for Interim High School Assistants' certificates, who in their specialist department have obtained (a) 80% of the aggregate of marks represented in the sessional records and the records of the final examinations and (b) 80% of the marks assigned to the Observation and the Practice-teaching.

COURSES FOR HIGH SCHOOL SPECIALISTS—*Cont.*

(2) On the recommendation of the examiners the Minister of Education may grant Interim High School Specialists' certificates to students exempt from attendance who hold or are awarded High School Assistants' certificates, who hold also the necessary academic certificates as specialists, and who obtain 60% of the marks assigned to the written examinations and to the Practice-teaching, respectively, in the specialist course concerned.

(3) (a) For students not in attendance the written examinations in the courses for Interim High School Specialists' certificates will be held at the end of the session at Toronto or at such local centres and under such conditions as may be determined by the Senate.

(b) For students not in attendance the practical examinations will be held at Toronto, except in the case of those to whose competency the visiting Provincial Inspector certifies, after due notification to such Inspector by the candidate of the latter's intention to become an applicant for a specialist's certificate and after due examination by such Inspector. A candidate who has failed in a practical examination at the Ontario College of Education, Toronto, or under a Provincial Inspector will not be admitted to a second practical examination during the same college year.

## COURSES FOR FIRST CLASS PUBLIC SCHOOL CERTIFICATES.

## CONDITIONS OF ADMISSION

20. Applicants for admission to the course for Interim First Class Public School certificates or to the final examinations for said certificates must comply with the conditions of admission prescribed for candidates for Interim High School Assistants' certificates. No candidate will be awarded an Interim First Class Public School certificate or receive credit towards said certificate *before* he has been awarded an Interim High School Assistants' certificate.

## FEES

21. When an Interim First Class Public School course is taken concurrently with the course for an Interim High School Assistants' certificate, or when the examination for an Interim First Class Public School certificate is taken concurrently with the examinations for an Interim High School Assistant's certificate, there is no additional fee. The fee for a First Class Public School course or for the examination of said course taken by one who already holds an Interim High School Assistants' certificate will be \$5.00 for the course or for the examinations, one or both, as the case may be, or \$2.00 for each examination paper.

## TEXT-BOOKS

22. The text-books for the academic work of the course for Interim First Class Public School certificates shall be those prescribed in each subject for the High, Public and Separate Schools. The text-books for the professional work shall be those whose titles are printed below in *italics*.

## PROGRAMME OF STUDIES

23. (1) The course of training, which is supplementary to the course of training for Interim High School Assistants' certificates, includes the following subjects:

Part I: Primary Reading and Spelling, Composition (including stories and biographies from History); Arithmetic, Primary and Advanced, Algebra, Geometry; two of Latin, French, German or Spanish, Greek, Biology, Physics and Chemistry; Elementary Science, Nature Study, Agriculture and Horticulture, Writing, Music, Art, Hygiene, Physical Education, Manual Training, Household Science (for women), as defined in the Ontario Normal School courses for Interim First Class Public School Certificates.



COURSES FOR FIRST CLASS PUBLIC SCHOOL—*Cont.*

Part II: Observation and Practice-teaching—at least thirty observations and fifteen practice lessons—to be conducted under conditions defined in Ontario Normal School courses for Interim First Class Public School certificates.

(2) To the instruction in the subjects of the course will be allotted a maximum of two hundred lecture periods.

## MODIFICATIONS OF COURSES

24. (1) Students who take the Latin, French, German or Spanish, Greek, or Music of the Interim High School Assistant's course will be exempted from the corresponding subjects of the Interim First Class Public School course. Similarly those who take the Mathematics of the Interim High School Assistant's course will be exempted from Advanced Arithmetic, Algebra and Geometry, and those who take Science from Elementary Science, Biology and Physics and Chemistry.

(2) Students who hold Provincial professional certificates in Physical Education, Writing, Music, Art, Agriculture, Manual Training, or Household Science will be exempted from the examinations thereon but will take the Observations and Practice-teaching therefor.

(3) Candidates who hold Provincial Second Class Public School certificates and who take Latin and a second language as the option of the Interim High School Assistants' course will be exempted from the instruction and examinations in all subjects of the Interim First Class Public School course except Advanced Arithmetic, Algebra and Geometry, Elementary Science, Agriculture and Horticulture, and Hygiene, while those who hold Provincial Second Class Public School certificates and take Mathematics and Science as the option will be exempted from the instruction and examination in all subjects of the Interim First Class Public School course except Agriculture and Horticulture, and Hygiene.

## EXAMINATIONS

25. (1) Subject to the condition that no student may be awarded an Interim First Class Public School certificate who does not already hold, or is not also awarded an Interim High School Assistants' certificate, the final standing of the students in attendance in the course for Interim First Class Public School certificates will be determined by the records of the Observation and Practice-teaching and by the combined results of the sessional records and the records of the final examinations in said course. Subject to the same condition, the final standing of candidates not in attendance will be determined by the records of the final written examinations and of practice-teaching.

COURSES FOR FIRST CLASS PUBLIC SCHOOL—*Cont.*

(2) The examinations in the subjects of the course for Interim First Class Public School certificates shall be conducted, *pari passu*, in the terms and under the conditions set out in the Calendar of the course for Interim First Class Public School certificates of the Ontario Normal Schools.

## CERTIFICATES

26. (1) (a) Subject to the conditions of Sec. 25 (1), and to the conditions defined in Ontario Normal School courses for Interim First Class Public School certificates, a candidate who obtains 50% of the marks in each subject of the course for Interim First Class Public School certificates and 60% of the aggregate of the marks in each of Observation and Practice Teaching may, on the recommendation of the examiners, be awarded by the Minister of Education, an Interim First Class Public School certificate.

(b) Subject to the same conditions, a candidate who passes in Observation and Practice Teaching and fails in not more than three subjects and who does not receive less than 45% in any subject, may, on the recommendation of the examiners, be granted by the Minister an Interim Second Class Public School certificate.

(c) Subject to the same conditions, a candidate who passes in the Observation and Practice-teaching and fails in not more than three subjects may be exempted from further attendance and may complete his course for an Interim First Class Public School certificate by rewriting at one annual examination, or, separately, at different annual examinations, the examinations in the subject or subjects in which he failed.

(2) All candidates other than those referred to in (b) and (c) who have failed to obtain the necessary final standing will be required to attend another session, beginning after the Christmas vacation.

(3) Regulations 12, (4) (a) (i), (ii), (iii), (b) (i), (c) (i), (ii), which apply to candidates for Interim High School Assistants' certificates who are exempt from attendance apply also, *pari passu*, to candidates for Interim First Class Public School certificates who are exempt from attendance.

## COURSES FOR ELEMENTARY CERTIFICATES IN PHYSICAL EDUCATION AND IN ART

### CONDITIONS OF ADMISSION

27. Students who have been admitted to the course for Interim High School Assistants' certificates will take also either the course for an Interim First Class Public School certificate or the course for the Elementary certificate in Physical Education or the course for the Elementary certificate in Art.

### FEES

28. As the course for the Elementary certificate in Physical Education or in Art may be an obligatory part of the course for the Interim High School Assistant's certificate, no additional fee is required.

### TEXT-BOOKS

29. Students in the courses for Elementary certificates in Physical Education or Art will supply themselves with such text-books as may be recommended by the instructors from the lists given under the details of those subjects.

### PROGRAMME OF STUDIES

30. (1) The subjects of the course for Elementary certificates in Physical Education or in Art are to be found on pages 38-42.

(2) To the instruction in the subjects of the course in Physical Education or in Art will be allotted a maximum of one hundred and twenty lecture periods.

### EXAMINATIONS

31. (1) The final standing of candidates for the Elementary certificate in Physical Education or in Art will be determined by the results of the sessional work, final practical tests, and final written examinations.

(2) (a) The following is the scheme of examinations and tests in Physical Education and the maximum marks for each:

#### *Written Examinations:*

Theory of Physical Education (one paper).

COURSES FOR ELEMENTARY CERTIFICATES IN PHYSICAL  
EDUCATION AND ART—*Continued**Sessional and Final Practical Tests:*

FOR WOMEN: General Gymnastics, Apparatus and Corrective Exercises, Group Athletic Games, Swimming, National and Folk Dances.

FOR MEN: Calisthenics, Apparatus, Games and Athletics, Swimming.

Fifty per cent. of the marks in each of the practical examinations will be assigned to the sessional and fifty per cent. to the final tests.

The subject of the written examination and each subject of the practical tests shall be valued at 100.

(b) The following is the scheme of examinations and tests in Art:

*Sessional Work:*

All sessional work must be completed satisfactorily before the other tests may be taken.

*Practical Time Tests:*

Drawing from common objects, in pencil, and in charcoal.

Drawing from nature.

Composition, simple illustration of a given subject.

Modelling of simple forms.

Design of conventionalized natural forms, lettering.

Colour painting still life in colour harmony.

Blackboard and memory drawing.

*Written Tests:*

Outlines of the history of art.

Theory of colour.

Design and applied art.

Elementary perspective.

Methods of teaching art in High and Continuation Schools.

Each subject and each paper shall be valued at 100.

## CERTIFICATES

32. (1) On the recommendation of the examiners the Minister of Education may grant an Elementary certificate in Physical Education or Art, as the case may be, to the student in the course for an Interim High School Assistant's certificate, provided that said student is awarded an Interim High School Assistant's certificate and obtains (a) in Physical Education a minimum of 50% of the marks assigned to each subject of (i) the written examination and of (ii) the practical tests, or (b) in Art a minimum of 50% of the marks assigned to each subject or paper of the practical and written tests, respectively.

COURSES FOR ELEMENTARY CERTIFICATES IN PHYSICAL  
CULTURE AND ART—*Continued.*

(2) (a) No student will be awarded an Elementary certificate in Physical Education or Art whose attendance or progress in any part of the course has been reported as unsatisfactory.

(b) The Dean will investigate the claims of the candidates who report themselves as unable for physical reasons to take the course in swimming, provided that such claims are presented to the instructor on a form and after a manner defined by the Minister of Education. If any candidate is exempted from the instruction in swimming by the Minister of Education that fact will be stated in his certificate.

(3) On the recommendation of the examiners, the Minister of Education may permit candidates in these courses who have completed the sessional work and taken all practical tests successfully but who have failed in one or more subjects of the written tests, to take the written tests without attending again or repeating their practical work or tests.

## DETAILS OF COURSES.

FOR HIGH SCHOOL ASSISTANTS', HIGH SCHOOL SPECIALISTS',  
AND FIRST CLASS PUBLIC SCHOOL CERTIFICATES AND  
FOR ELEMENTARY CERTIFICATES IN PHYSICAL EDUCATION AND ART.

33. The topics of the subjects of the courses for Interim High School Assistants' and High School Specialists' certificates and for Elementary certificates in Physical Education or Art are given below. For the courses for Interim First Class Public School certificates these topics and subjects must be supplemented by the topics and subjects set out in the Normal School courses for First Class Public School certificates.

## THE SCIENCE OF EDUCATION.

*34. Introduction.*—Democracy and education; the special need for education in a democracy; teaching as a vocation; teacher-training in a modern educational system.

*General Method.*—The meaning of method and its psychological foundations; procedures common to various branches of teaching; types of lessons; notes of lessons.

*Principles of Education.*—The nature and aims of education; the function in education of the state, home, church, vocation, etc.; the curriculum, its nature, purpose, and selection; modern movements for the reform of education.

*Educational Classics.*—The study in class of selected portions of a few educational classics.

*Educational Psychology.*—The original nature of man, including a study of heredity, instinct, and capacities.

The Psychology of the learning process, including the study of such topics as habit, rates of learning, practice, fatigue, memory, reasoning.

The Psychology of typical high school branches; standard scales for their measurement.

The measurement of general intelligence; an examination of the Binet-Simon and other tests.

Child Study, its aims, methods, and results.

## DETAILS OF COURSES.

*Books of Reference:*

*Ontario Normal School Manuals: Science of Education, History of Education.*

Adams (Ed.): *The New Teaching.*

Dewey: *Democracy and Education.*

Gates: *Psychology for Students of Education.*

Kilpatrick: *Foundations of Method.*

Raymont: *Principles of Education.*

Sandiford: *Mental and Physical Life of School Children.*

Starch: *Educational Psychology.*

Waddle: *Introduction to Child Psychology.*

Waples: *Procedures in High School Teaching.*

Woodrow: *Brightness and Dullness in Children.*

## SCHOOL MANAGEMENT AND LAW.

35. School Management, School Organization, School Administration; aims and scope of each; relation of each to the teaching process.

Forms of educational control; Department of Education and its functions; school boards and their functions; relation of inspectors and principals to teachers; teachers to caretakers, trustees; finance of education; business administration.

Types of schools; functions of each type, primary, secondary, and higher schools; consolidated schools; day and evening schools; training schools; vocational schools; schools for subnormal children, defectives, and delinquents.

School sites and surroundings; school buildings; construction, care-taking, heating, ventilation, lighting, sanitation, decoration, and equipment; apparatus; text-books, authorization, use and abuse; free text-books; visual aids; medical and dental inspection; the detection of communicable diseases.

The teacher: characteristics, qualifications, appointment, tenure of office, promotion, improvement of status; superannuation of the teacher; duties of the teacher in relation to pupils, parents, and other citizens; qualifications and characteristics of the successful teacher; his code of ethics.

The pupil: privileges and duties; the health of the pupil; the formation of his habits; the teacher's responsibility; fatigue; moral training.

Organization: grading and classification; promotion; retardation; elimination; care of individual and of abnormal.

The recitation: assignments; oral and written exercises; how to study; questioning; treatment of answers.

Discipline: its scope; relation to methods of teaching; incentives; causes of disorder and inattention; methods of dealing with weaknesses and offences; penalties.

## DETAILS OF COURSES.

**Time-tables:** purpose; principles involved in construction; typical daily programmes for various kinds of schools.

**Records and reports:** keeping registers; value and kinds of school records; forms of reports.

**Examinations and other tests of progress.**

School Law and Regulations and Public Health Acts and Regulations in so far as they refer to the duties of school boards, teachers and pupils.

The high school library: use of card catalogues, reference books, and periodicals; organization and administration of library; relation of school library to community; selection of books; reading room; relation of library to study period; care of books.

**Books of Reference:**

*Regulations and Courses of Study for the Public, High and Continuation Schools of Ontario.*

*Ontario Schools Acts, and Public Health Act.*

*Ontario Normal School Manual: School Organization and Management.*

Bennett: School Efficiency.

Bagley: Class Management; School Discipline.

Colvin: Introduction to High School Teaching.

Cubberley. The Principal and his School.

Hume: The Improvement of the Elementary Teacher in Service.

Johnston: The Modern High School.

Stout: The High School.

## ENGLISH.

36. (1) *Literature*.—The place of literature in school courses; the principles followed in Ontario and elsewhere in arranging literature courses for schools; books suitable for intensive and extensive study in the various forms or grades of the school; class treatment of such types of literature as the short poem, the long narrative poem, the play, the short story, and the novel; examinations in literature; supplementary reading, its importance, selection of books, testing of reading.

The course in literature includes a consideration of the problems connected with the teaching of silent and expressive reading and voice training.

(2) The content and value of the course in grammar in Continuation and High Schools; the work to be covered in the Lower School; use of a text-book in grammar; terminology; the use of definitions; treatment of false syntax; methods of conducting instruction in grammar discussed and illustrated in lessons upon topics difficult of presentation.



## DETAILS OF COURSES.

(3) *Composition*.—The aim in teaching composition; principles to be followed in arranging a course; the place of rhetoric in the High School course; the use of models; choice and variety in subjects; assigning, valuing and correcting compositions; special problems of oral composition.

*Books of Reference:*

*Ontario High School Grammar.*

*Ontario High School Composition.*

*Public School Manual in Composition.*

*Bolenius: The Teaching of Literature in Grammar Grades and the High School.*

*Dickie: Modern Practice in the Teaching of Composition.*

*Macpherson: The Study of English Literature.*

*Bolenius: The Teaching of Oral English.*

*Carpenter, Baker and Scott: The Teaching of English.*

*Chubb: The Teaching of English.*

*Clark: How to Teach Reading in the Public School.*

*Fairchild: The Teaching of Poetry in the High School.*

*Haddow: On the Teaching of Poetry.*

*Lamborn: The Rudiments of Criticism.*

*Stone: Silent and Oral Reading.*

## HISTORY.

37. The purpose of High School history; the tools of the teacher of history; High School courses in history and civics; methods of teaching; treatment of current events; collateral reading; note books; types of examination.

*Books of Reference:*

*Public School Manual: History.*

*Tryon: The Teaching of History in Junior and Senior High School.*

*Barnard: The Teaching of Community Civics.*

*Bourne: The Teaching of History and Civics.*

*Dunn: Social Studies in Secondary Education.*

*Jarvis: The Teaching of History.*

*Johnson: The Teaching of History.*

*Macpherson: Visual Aids in the Teaching of History.*

## SEMINAR IN ENGLISH AND HISTORY.

38. *English:*

(a) A study of topics difficult of presentation in the English grammar, composition, and literature prescribed in the High School courses of study.

## DETAILS OF COURSES.

(b) A discussion of the organization of the course in English throughout the various Forms of the High School.

(c) A study of the methods of class-room procedure in the teaching of English, and of problems arising therefrom.

*Books of Reference:*

*Chubb: The Teaching of English.*

Boillot: *The Methodical Study of Literature.*

Hosic: *Reorganization of English in Secondary Schools* (Bulletin No. 2, 1917, Bureau of Education).

Leonard: *Essential Principles of Teaching Reading and Literature.*

Newbolt: *Report on the Teaching of English in England.*

Tomkinson: *The Teaching of English.*

Articles in "The English Journal" and other journals.

## HISTORY:

(a) A study of topics difficult of presentation in the prescribed history.

(b) A discussion of the courses in history that are adapted for pupils of various ages, and of the corresponding methods of teaching.

(c) A study of the method of research in history. The preparation of short monographs on assigned topics.

*Books of Reference:*

*Johnson: The Teaching of History.*

*Tryon: The Teaching of History in Junior and Senior High Schools.*

Allen: *The Place of History in Education.*

Dunn: *Social Studies in Secondary Education* (Bulletin No. 28, 1916, Bureau of Education).

Hasluck: *The Teaching of History.*

Keatinge: *Studies in the Teaching of History.*

Articles in "The Historical Outlook" and other journals.

Simpson: *Supervised Study in History.*

## MATHEMATICS.

39. *Arithmetic.*—A brief study of present-day movements in Arithmetic; the fundamental changes in the purpose and method of teaching arithmetic; the content selected for teaching; and the relation of arithmetic to the life of the child.

## DETAILS OF COURSES.

The origin of number ; the various steps involved in the development of the number idea; the unit, its nature and use; the necessity for standard units; number, a ratio.

Methods: Analysis and synthesis, induction and deduction, illustrated and applied; the use of concrete material and apparatus; use of graphic methods; drill and devices to secure neatness, accuracy and rapidity of computation; importance, place, and treatment of mental arithmetic. Checking and verifying of results in arithmetic.

The value of problems; selection of problems; interest in problems for which the pupils themselves furnish the materials; where and how to assist pupils; type solutions; the unitary method, its merits and limitations; solutions by full analysis and by performing only necessary operations.

Fractions: (a) vulgar, different interpretations; numeration and notation; operations; conditions under which these operations can be performed; measures and multiples; (b) decimal; as special fractions and as complements of common notation; correspondence of methods with those of integers. Approximations.

Compound rules; tables of weights and measures; reduction; operations.

The metric system, when and how it should be taught.

Square root by factoring and by the formal method, illustrated geometrically and algebraically.

Commercial arithmetic: how to make topics like discount, stocks, exchange, etc., concrete to the pupil; use of tables in calculating interest, discount, taxes, etc.; commercial and business forms.

Mensuration; the application of arithmetic to space relations; theoretical and practical methods of obtaining formulae; practical problems to show the use of these formulae; the necessity of models in teaching mensuration.

*Algebra.*—Arithmetical algebra; transition from arithmetic to algebra; generalization of language and of method; the introduction and defining of symbols; the negative quantity; the simple rules; the distributive law, commutative law, index law, sign rule; the equation and its place in algebra; factoring; highest common factor and lowest common multiple; use of detached co-efficients; classes of simple equations; symmetry and its applications in elementary algebra; square root; method of dealing with problems and the object to be kept in view in their solution; verifying and checking results; correlation of algebra and geometry; graphical methods of illustrating formulae and of interpreting the roots of equations.

The theory of fractional and negative indices; surds and surd equations; quadratic equations of one and two unknowns; theory of quadratics; simple ratio and proportion.

## DETAILS OF COURSES.

*Geometry.*—Practical geometry to precede the theoretical; use of instruments; paper folding; necessity for accuracy; distinction between practical geometry and geometrical drawing; practical problems in the solution of triangles and in measuring heights and distances; limitations of appeals to the concrete; value of experimental proofs; need of clear and definite conceptions of the fundamental truths; the place of the definitions and axioms; when and how they should be introduced; the proposition; home-work and class-work; the analytic-synthetic method of dealing with propositions and deductions; the comparative values of propositions and deductions; the comparative values of propositions and exercises; how to get pupils to work original exercises; necessity of original work from the beginning of theoretical geometry; the indirect method of demonstration; methods of class teaching; importance of note-books for pupils' exercises; the grouping and relating of propositions; practical applications; algebraic solutions; Euclid's method compared with modern methods; method of teaching the more important propositions and exercises in Book I of the authorized text.

*Books of Reference:*

- Public School Manual in Arithmetic.*  
 McMurry: Special Method in Arithmetic.  
 Ligda: The Teaching of Elementary Algebra.  
 Lannes: The Teaching of Arithmetic.  
 Young: The Teaching of Mathematics.

## SEMINAR IN MATHEMATICS.

40. The seminar in Mathematics will discuss methods in Trigonometry and the more advanced parts of Algebra and Geometry; the order of presenting the parts of these subjects so as to secure the most logical and impressive relation among the parts; the relations of the subjects themselves; the place of the teacher in dealing with more mature minds; the history and development of such special topics as the algebraic equation, the vulgar and decimal fraction, loci, maxima and minima, theory of parallel lines, etc.; examinations in mathematics, their purpose, when they should be held, the character of the paper, methods of marking, etc.

*Books of Reference:*

- Howell: A Foundation Study in the Pedagogy of Arithmetic.  
 Thorndike: The Psychology of Arithmetic.  
 Fink: A Brief History of Mathematics.  
 Schultze: The Teaching of Secondary Mathematics.  
 Articles in "School Science and Mathematics".

## DETAILS OF COURSES.

## GEOGRAPHY.

41. Scope and Method of Geography: Relationship to other subjects of the courses of study; general methods of presentation with advantages and disadvantages of each method.

Regional Geography: Maps; different kinds, importance of each, map drawing; use of pictures, globes and other visual aids; use of text-books, readers, reference books; methods of treatment of typical regions.

Commercial Geography: Factors determining commerce; chief commercial commodities; geographical factors determining their production and distribution; relation of physical features to commerce; commercial geography of selected regions; methods of treatment of typical problems.

Physiography: Relation of physical to commercial and regional geography; importance of experimental work; use of such aids as contour, isobar, isotherm, and weather maps; interpretation of the physical geography of Ontario. A discussion of the method of treatment of topics difficult of presentation from the physical geography prescribed for the High Schools of Ontario.

*Books of Reference:*

*Public School Manual: Geography.*

Wallis: *The Teaching of Geography.*

Chisholm: *Handbook of Commercial Geography.*

Lake: *Physical Geography.*

Brown: *Principles of Economic Geography.*

## SCIENCE.

42. The following are the main topics of the course:

A. Scope and value of the natural sciences; meaning of science and scientific method; educational value of science; inductive and deductive methods of investigation.

Experimental work; how conducted, how recorded; manipulation of apparatus; glass-working; making of simple apparatus; classroom discussion, its purpose, method, and relation to the experimental work; the use of text-books; note-books, method of inspection, drawing; reference books, most suitable books in each subject for the library; supplementary reading; methods in science of the Lower School, illustrated in lessons upon subjects difficult of presentation.

B. Laboratory equipment for the teaching of Elementary Science, and of Physics, Chemistry, and Biology; methods of demonstration; use of technical terms; theories, facts, scientific laws; text-books and reference books.

## DETAILS OF COURSES.

**Chemistry:** Order of treatment; introductory work. Methods of conducting instruction in Chemistry will be discussed, and illustrated in lessons upon subjects selected from such topics as the following: chemical laws and theories; valency; formulae and equations; nomenclature; qualitative and quantitative experiments; chemical arithmetic; the elements, with sodium and chlorine as types.

**Physics:** Methods of conducting instruction in the more difficult parts of the courses in heat, light, sound, magnetism, electricity, and mechanics will be discussed and illustrated in lessons upon subjects selected from such topics as the following: specific gravity, properties of liquids and gases, machines, temperature, specific heat, laws of reflection, images in mirrors and lenses, laws of vibrating strings with problems, interference of sounds, lines of magnetic force, relation between statical and current electricity, practical applications of electricity.

**Biology:** Dissection; experiments with plants; the microscope; aquaria and terraria; school museums; plant and animal ecology. Methods of conducting instruction in biology will be discussed and illustrated in lessons upon subjects selected from such topics as the following: relation of structure to function, animal and plant types as the grasshopper, frog, hepatica, fern. This discussion will assume a practical acquaintance on the part of the student with the common plants and animals of Ontario.

*Books of Reference:*

- High School Manual: Suggestions for Teachers of Science.*
- Burlend: First Course in Zoology.
- Gregory and Simmons: Lessons in Science.
- Twiss: Principles of Science Teaching.
- Lloyd and Bigelow: The Teaching of Biology.
- Smith and Hall: The Teaching of Chemistry and Physics.

## SEMINAR IN SCIENCE.

43. **Manipulation:** Practice with apparatus used in High School demonstrations; preparation of illustrative charts; the projection lantern; photography; preparation of lantern slides; care of aquaria and vivaria; growth of plants for experiments in vegetable physiology; collection and preservation of botanical and zoological material for Upper School work.

**Equipment:** Laboratory accommodation; arrangement of laboratories; lighting and ventilation; arrangement and structure of benches and other furniture; care and purchase of apparatus; chemicals and minerals, most suitable kinds, method of preparation and storage; reference works and periodicals in science for the High School library.

## DETAILS OF COURSES.

Methods of treating topics difficult of presentation in physiography, physics, chemistry, biology discussed, and illustrated in lessons selected from the following topics: geological history of the Great Lakes in its relation to the physical features of Ontario; geographical significance of minerals and rocks; protection and colour of animals; Mendelism; plants in relation to insects; form and colour of flowers; parasitic and saprophytic plants; insectivorous plants; laws of combination in chemistry; symbols, formulae, and equations; valency; atomic and molecular theories; Boyle's Law; Charles' Law; electron theory of matter; absolute temperature; relation of acceleration, momentum, force, and energy; surface tension; flow of liquids.

*Books of Reference:*

- Ganong: The Teaching Botanist.  
 Ganot: Text-book in Physics.  
 Kerner: Natural History of Plants.  
 Davis: Natural History of Animals.  
 Laboratory Accommodation, Pamphlet No. 9 of Department of Education of Ontario.  
 Mann: The Teaching of Physics.  
 Mellor: Modern Inorganic Chemistry.  
 Twiss: Principles of Science Teaching.  
 U.S. Bureau of Education Bulletin 63, 1919: Natural Science Teaching in Great Britain.  
 U.S. Bureau of Education Bulletin 26, 1920: Reorganization of Science in Secondary Schools.

## SEMINAR IN AGRICULTURE.

44. The history of agricultural education, especially in Denmark, the United States and Canada; methods of conducting laboratory and plot work; relation of the course in agriculture to vocational education; laboratory work.

*Books of Reference:*

- Barkett, Stevens and Hill: Agriculture for Beginners.  
 Manual of Elementary Agriculture and Horticulture.  
 Marshall: Microbiology.  
 Plumb: Types and Breeds of Farm Animals.  
 Sanderson: Insects of Farm, Garden and Orchard.  
 Snyder: Soils and Fertilizers.  
 Warren: Elements of Agriculture.  
 Waters: The Essentials of Agriculture; Farm Management.

Note: Candidates for Specialists' certificates in Agriculture will take also the course in Science for High School Assistants.

## DETAILS OF COURSES.

## CLASSICS (LATIN AND GREEK).

45. The relation of method in teaching Latin or Greek to linguistic method in general; the effect of the object of teaching Latin or Greek upon the method in various departments, such as oral reading, grammar, translation, sight reading, and the literary or historical content; illustration of methods in typical lessons.

Pronunciation; oral reading, sight reading, and English translation as prescribed for Normal Entrance or Pass Matriculation; general principles of word-structure and sentence-structure; word order; methods of teaching the parts of a lesson; the direct method; topics of inflection and syntax as found in the Latin and Greek Books; special emphasis on difficult topics.

*Books of Reference:*

- Bennett: The Teaching of Latin.
- Chickering and Hoadley: Beginner's Latin by the Direct Method.
- Gildersleeve and Lodge: Latin Grammar.
- Westaway: Quantity and Accent in the Pronunciation of Latin.
- Bristol: The Teaching of Greek.
- Thompson: Homeric Grammar.
- Goodwin: Greek Grammar.
- Goodell: Greek Grammar.
- Arnold: On Translating Homer.
- Game: The Teaching of High School Latin.

## SEMINAR IN CLASSICS.

46. In the seminar in Classics, topics are chosen germane to the teaching of Horace, Virgil, Cicero, Caesar, Xenophon, Homer, and continuous Latin prose composition. The following list will show the nature of the topics for discussion:

The teaching of Horatian metres; the poetic art of Horace; the translating of Horace into English prose; the use of metrical versions; certain *Asclepiadean* odes; the national odes; Horace's treatment of religion, death, friendship, and fortune; the selection of "fine lines"; the complete teaching of an ode of Horace; the appropriate commentary.

The difficulties in translating Cicero; the sequence of tenses in Caesar's indirect discourse; the teaching of Latin prose composition; the teaching of Xenophon in an honour class; the classical library.

*Books of Reference:*

- Bennett and Bristol: The Teaching of Latin and Greek.
- Articles in the "Classical Journal".
- Seymour: Life in the Homeric Age.
- The American Classical Investigation: Report, Parts 1 and 3.



## DETAILS OF COURSES.

## FRENCH, GERMAN, OR SPANISH.

47. Introductory: Importance of the study of a modern language; aims of the study.

Study of Methods: A comparison of methods in view of the present conditions in the schools, *e.g.*, the age and attainments of pupils, the size of classes, allotment of time, text-books in use, regulations governing the teacher; illustrative lessons.

Pronunciation: Study of phonetics; theory and practice.

Elementary Classes: Classes conducted without a text-book; conversation lessons; how to make use of the objects of the classroom, pictures and drawings; unison work; variety and interest; dictation; note-books and their correction; picture lessons; necessity for thorough drill.

Grammar: Inductive and deductive teaching; grammatical rules and their value; special illustrative lessons on essentials.

Translation into English: Importance; aims; methods of conducting the recitation. Special consideration of selected passages from the Reader and the Authors prescribed for Junior Matriculation.

Composition to be based on models; free reproduction; original essays; writing of letters; methods of correction; training in the use of the dictionary.

*Books of Reference:*

Bagster-Collins: The Teaching of German.

Bahlsen: Teaching of Foreign Languages.

Dumville: French Pronunciation.

Heath: Report of the Committee of Twelve.

Jespersen: How to Teach a Foreign Language.

Palmer: Scientific Study and Teaching of Languages.

Savory and Jones: Sounds of the French Language.

Vietor: German Pronunciation.

## SEMINAR IN FRENCH AND GERMAN.

48. The seminar will lay stress upon the consideration of the value, aims, and methods of linguistic training; the relation of linguistic training to literary culture; history of methods formerly employed in the teaching of modern languages in the secondary schools of France, Germany, Great Britain, and the United States; the necessity for better methods in Ontario; the Direct Method illustrated in the class-room; a study of French life, manners, and institutions; the importance of pronunciation; the value and use of phonetic symbols, use of phonetic charts and wall-pictures; typical lessons in advanced grammar, conversation, translation, sight reading, prose composition; free reproduction exercises, dictation, and audition; writing and correction of passages in French composition; consideration of books helpful to the teacher; the extent of the course in the Upper School; writing essays on allotted subjects.

## DETAILS OF COURSES.

*Books of Reference:*

- Bagster-Collins: German in Secondary Schools.  
 Bahlsten: Teaching of Modern Languages.  
 Brebner: Method of Teaching Modern Languages in Germany.  
 Breul: Teaching of Modern Languages.  
 Dumville: French Pronunciation.  
 Geddes: French Pronunciation.  
 Gouin: The Teaching and Studying of Languages.  
 Gouris: Teaching by the Direct Method.  
 Jespersen: How to Teach a Foreign Language.  
 Kittson: Theory and Practice of Language Teaching.  
 Rippmann: Elements of Phonetics.  
 Savory and Jones: Sounds of the French Language.  
 Sweet: Practical Study of Languages.  
 Walter: Zur Methodik des neusprachlichen Unterrichts.

## VOCAL MUSIC.

49. Tune: All intervals of the Major Diatonic Scale, both from the Tonic Sol-fa and staff; the relative minor; transition.

Time: Whole pulse, continued pulse, silent pulse, and pulse divided into halves, quarters, and thirds with the various combinations of these in simple and compound duple, quadruple, and triple times. All the above in both the Tonic Sol-fa and staff notations.

Ear-training in Time and Tune: Recognition of rhythm and tone, of short musical phrases when played or sung, and their expression in either notation.

Voice-culture: Breath-control, tone production, vowel-formation, enunciation of consonants, correct intonation, blending of registers, and general training for quality, range, and flexibility.

Sight-singing: Singing from pointing on modulator or staff. Singing at sight easy passages containing the varieties of time and tune mentioned above.

Songs: The study of songs, in one or two parts, suited to the requirements of pupils in various school grades; with special attention to accent, enunciation, phrasing, quality of tone and expression.

Notation: Elements of notation, both Tonic Sol-fa and staff; the formation of the major and minor diatonic scales; elements of modulation and transposition.

Vocal Physiology: Anatomy of lungs, larynx, and resonating cavities; comparison of abdominal, intercostal and clavicular methods of breathing; action of vocal chords in production of tone and of the various vocal registers; influence of resonating cavities upon quality of tone and vowel; care of voice in speaking and singing.

# DETAILS OF COURSES.

Methods: The grading of school music to suit the development of the pupils and the methods of teaching both systems.

## Books of Reference:

- Cringan: The Educational Music Course.*
- Cringan: Teacher's Handbook of Tonic Sol-fa System.*
- Curwen: The Standard Course.
- Curwen: The Teacher's Manual.
- Hardy: How to Train Children's Voices.
- Hulbert: Breathing for Voice Production.
- Mason: How to Teach the Staff Notation.

# SEMINAR IN HOUSEHOLD SCIENCE.

50. The development of Household Science; the relation of household science to the other subjects of the curriculum; its value and aims; characteristics of various types of pupils in elementary and secondary schools and in the University; accommodations and equipment for household science work in rural, consolidated, urban, and special classes; planning and discussion of courses of study; methods of instruction; problems of organization and class management.

## Books of Reference:

- Ontario Public School Manuals: *Household Science for Rural Schools, Household Management, Sewing.*
- Cook: Essentials of Sewing.
- Baldt: Clothing for Women.
- Cooley, Winchell, Spohr, Marshall: Teaching Home Economics.
- Kinne: Equipment for Teaching Domestic Science.
- Hanna: Methods of Teaching Home Economics.
- Bevier: Home Economics in Education.
- Leake: Vocational Education.
- Syllabus of Home Economics (American Home Economics Association, Baltimore, Md.).
- Vocational Homemaking Education (Teachers' College, Columbia University, New York, N.Y.).
- Bulletins, Home Economics Series (Federal Board for Vocational Education, Washington, D.C.).

# PHYSICAL EDUCATION

## 51. THEORY: (For men and women):

(1) First Aid: The anatomy and physiology of the human body will be briefly outlined. First aid as applied to injuries received in the home, school, schoolyard, and athletic field will be considered fully. Camp and industrial injuries will be discussed also.

## DETAILS OF COURSES.

(2) *Physical Education in the Educative Process*: The relation of physical education to education in general; discussions of the place of Drill, Calisthenics, Apparatus Work, Games, and Physical Examinations in a school programme; intramural activities and interscholastic athletics; organization and administration of a Physical Education Department.

(3) *Mass Athletics and Intramural Activities*: A consideration of the problem of handling large groups effectively and arousing active interest of all students in athletic activities within the school; a study of various methods of reaching every student and establishing individual, class and school competition in physical activities.

(4) *Health Talks*: What the teacher can do to further good health in schools; subject matter for health talks by teachers: the place of food, exercise, sleep, hygiene in maintaining good health, preventive measures for pupils.

## PRACTICE: (For men):

(1) *Gymnasium Tactics*: Class formations to suit the many conditions found in the schools of the province; marching tactics; gymnastic nomenclature; proper use of the voice.

(2) *Calisthenics*: Elementary exercises with light apparatus, such as wands, dumbbells, clubs; freehand drills; body building and corrective work; practice teaching in calisthenics.

(3) *Apparatus Work*: Elementary training and practice teaching in exercises for the following apparatus: horse, parallel bars, mats, vaulting-bar, buck, rings, and suspended ladder.

(4) *Group Games*: Practice in games suitable to the classroom, school yard, gymnasium and playground.

(5) *Team Games*: Indoor baseball, volley ball, basketball.

(6) *Track and Field Athletics*: A course in training methods and correct form for all standard track and field events.

(7) *Swimming*: (a) The organization and administration of the "water gymnasium"; (b) Teaching Methods; (c) Life Saving Courses.

NOTE—In order to secure standing, students must be able to swim at least two kinds of stroke, such as the crawl and the back strokes.

## PRACTICE: (For women):

(1) *General Gymnastics*: Swedish exercises; calisthenic exercises using wands, dumbbells and clubs, etc.; class formations, marching tactics.

(2) *Group Games*: Gymnasium and playground active games; athletic games—basketball, softball, volleyball; field day sports and games; how to organize and conduct the above games.

## DETAILS OF COURSES.

(3) Apparatus Work: (a) Exercises on the horse, parallel bars, stall bars, suspended ladder; (b) corrective exercises for postural defects in the growing child.

(4) National and Folk Dances: National and Peasant dances of various countries—emphasizing English Country and Morris dances.

(5) Swimming: Same as for men.

*Books of Reference:*

*The Syllabus of Physical Exercises for Schools.*

Bancroft: Games for Playground, Home, School and Gymnasium.

Burchenal: Dances of the People.

Burchenal: Folk Dances and Singing Games.

Chalif: Chalif Text-book of Dancing.

Corean: The Diving and Swimming Book.

Fisher and Fiske: How to Live.

Handley: Swimming for Women.

May: Graded Exercises in Calisthenics and Gymnastic Apparatus.

Pohl: Manual of Dancing Steps.

Pyle: Personal Hygiene.

Royal Life Saving Society Handbook of Instruction.

Staley: Games, Contests and Relays.

Spalding's Athletic Library.

Sullivan: The Science of Swimming.

## SEMINAR IN PHYSICAL EDUCATION

Principles of selection and systematizing, grading and progression of activities; essentials for successful teaching; control and class management; methods and technique in class formations, commands, presentation of subject matter; aims and values; physical examinations.

*Books of Reference:*

Skarstrom: Gymnastic Teaching.

Knudsen: A Textbook of Gymnastics.

Bukh: Primary Gymnastics.

Staley: Calisthenics (modern methods).

Williams: The Organization and Administration of Physical Education

Bancroft: The Posture of School Children.

Bowen and McKenzie: Applied Anatomy and Kinesiology.

McKenzie: Exercise in Education and Medicine.

Bundy: Anatomy and Physiology.

Lovett: Round Shoulders and Spinal Curvature.

The American Physical Education Reviews.

## THEORY AND PRACTICE.

## 52. A. REPRESENTATION.

(1) *Pencil and Charcoal Drawing:*

The proper handling of the lead pencil and charcoal.

The principles of drawing, (1) in outline, (2) in neutral tones to represent colour values, and light and shade.

The principles of elementary perspective.

The study of the effects of light and shade and shadow.

The study of the laws of composition in the pleasing arrangement of objects in small groups.

Freehand drawing, above and below the eye level, in outline, and in neutral tones, (1) from common manufactured objects of curvilinear and of rectilinear form, and (2) from natural forms, as flowers, fruits, plants, trees, insects, animals, etc.

Freehand drawing from memory.

## DETAILS OF COURSES.

(2) *Blackboard Drawing:*

Practice in making rapid sketches on the blackboard to ensure its use by the student-teacher in teaching other subjects of school study besides art.

(3) *Modelling:*

Modelling in clay and in plasticine of simple forms.

Casting in plaster.

(4) *Water Colour Painting:*

The theory of colour; colour perception; spectrum standards; properties of colour (hue, value, intensity); colour harmony (complementary, analogous, contrasted, and monochromatic scales).

Construction of colour charts.

Brushwork in monochrome.

Water colour painting from common manufactured objects, and from natural forms, of a single object and of small well-composed groups.

## B. DESIGN AND LETTERING.

(1) *Decorative Design:*

The principles of decorative design.

The use of geometric and of natural forms in design.

The making of decorative designs and applying them to useful purposes.

The completion of decorative designs in balanced neutral tones and in harmonious colour schemes.

(2) *Lettering:*

The principles of lettering.

Lettering with the freehand and with mechanical aids.

The adaptation of lettering in exercises in applied design.

**C. ART APPRECIATION AND THE HISTORY OF ART:**

Pictorial Composition: The essential artistic qualities of pictures—in line, tone, and colour.

The study of masterpieces. Essays.

Illustration of given themes.

Visits for study to the Museum and the Gallery of Art.

The study of home and school furnishings and decoration.

An outline of the History of Art.

**D. METHODS OF TEACHING ART IN HIGH AND CONTINUATION SCHOOLS:**

The Regulations of the Department of Education.

The real objects to be sought in the teaching of Art, involving a consideration of its relation to the life of the student and to the interests of the community.

**DETAILS OF COURSES**

The organization and equipment of classes.

The care of materials and of drawings.

The courses of study. A natural order and method of development of the subjects and the principles of these courses.

Methods of teaching form (including proportion and perspective), tone, colour, composition, decorative design, handling of mediums, and the appreciation of pictures.

The preparation of studies for class work.

The division of the time given to Art. The correlation of Art with other studies.

Conducting examinations in Art. Points to stress in criticising and valuing drawings.

A discussion of teaching difficulties and methods of overcoming them.

A description of teaching helps and information as to how and where they may be secured.

**Books of Reference:**

*Ontario Teachers' Manual: Art.*

Branch: Illustrated Exercises in Design.

Caffin: How to Study Pictures.

Cross: Colour.

Cross: Light and Shade.

Low: Composition.

Hatton: Perspective.

Norton: Freehand Perspective and Sketching.

Prang's Art Education for High Schools.

Reinach: Apollo—Story of Art throughout the Ages.

Seaby: Drawing for Art Students.

Simonds: Modelling in Clay and Wax.

Strange: Handbook of Lettering.

Taylor: Elementary Art Teaching.

## COURSE FOR ORDINARY CERTIFICATES IN HOUSEHOLD SCIENCE.

### CONDITIONS OF ADMISSION

A candidate for admission to the course for the Interim Ordinary certificate in Household Science should make application, not later than September 27th, on a form to be obtained from the Secretary of the Ontario College of Education and should submit with this application:

- (1) A certificate from a competent authority that she is a British subject.
- (2) A certificate from a clergyman or other competent authority that she is of good moral character.
- (3) A certificate from a physician that she is physically able for the work of a teacher and, especially, that she is free from serious pulmonary affection and from defective eyesight or hearing.
- (4) A statement signed by herself to the effect that she intends, when opportunity offers, to teach the subject of Household Science.

(5) One of the following:

- (a) A Second-Class or First-Class Public School or a High School Assistant's certificate.
- (b) A Kindergarten-Primary or a Kindergarten Director's certificate together with Normal Entrance or equivalent certificates under other names.

### FEEES

- (1) The annual fee, which shall include tuition, laboratory supplies, and the use of the library shall be \$25.00.
- (2) At the beginning of the session, a deposit of \$4.00 will be required from each student. This deposit, less the cost of equipment and apparatus that may have been destroyed, will be returned at the close of the session.
- (3) If a student who has been granted an Ordinary Certificate teaches the subject of Household Science in a school in the Provincial system during the year following the examination, the fee of \$25 will be returned to her on the report to the Minister of Education by the Inspector of Household Science that the work has been satisfactorily performed. Applications for such refunds should be made to the Deputy Minister of Education.

### COURSE OF STUDY

The Course of Study for the Ordinary certificate in Household Science includes the following:



COURSES IN HOUSEHOLD SCIENCE—*Continued.*

## PART I

## FOODS

*Economics.*—Marketing; points to be considered in selection; factors determining cost; saving of materials, fuel, and labour in preparation; care in the home; utilization of left-overs.

*Food Values.*—Composition of foods; requirements to maintain the body in health; factors influencing diet; digestion of foods; menu planning; diets for infants, children, and adults; special diets for use in the home care of the sick.

*Preparation.*—Scientific principles underlying methods of preparation; application of these principles by preparing food materials; practical and theoretical demonstration work; meal preparation (children's meals, home meals, the rural school lunch, etc.).

Table Service and Manners.

Special Schoolroom Methods.

## CLOTHING

*Selection.*—Brief history of textile arts; source and properties of the principal fibres of commerce (cotton, linen, wool, silk, artificial silk); study of fabrics made from these fibres, emphasis upon prices, uses and wearing qualities; principles of design.

*Construction.*—Hand and machine sewing; use and care of sewing machine and its attachments; use of home and commercial patterns; application of constructive processes to simple articles; cutting and making simple garments.

*Care.*—Daily, weekly, and seasonal; removal of stains; repairing.

Special Schoolroom Methods.

## HOUSEHOLD MANAGEMENT

*The House.*—Planning; furnishing; care (study of reagents, cleaning of metals, woods, textiles, laundry work); demonstrations; household administration (problems and technical procedures in the management of the modern home); household budget.

*Sanitation.*—Effect of environment on health; sanitary control of surroundings; disposal of waste.

*Home Nursing.*—Care of the infant, child, and adult; emergencies; bandaging.

Special Schoolroom Methods.

COURSES IN HOUSEHOLD SCIENCE—*Continued.*

## ELEMENTARY APPLIED SCIENCE

Structure, life history, and economic value of bacteria and yeast; chemical composition and reaction of household materials; physiological values of foods and changes which they undergo in digestion, putrefaction, etc.; testing of water, carbohydrates, proteins, fats, vegetables, flours, cereals, baking powders, beverages, etc.

## GENERAL METHODS IN HOUSEHOLD SCIENCE

Development, aims and scope of Household Science; educational value and relation to other subjects; study of types of pupils, schools and equipment; problems of organization; methods of presentation; planning of courses. General discussions.

## PART II.

Observation and Practice-teaching will be provided in the Public and High Schools of Toronto and will include a minimum of six practice lessons per student with an equal number of periods for observation lessons.

## EXAMINATIONS

(1) Candidates for Ordinary certificates shall pass in each of Parts I and II under the following conditions:

## (a) Part I.

The following shall be the subjects in Part I with the maximum value for each subject:

Foods	(200)
Clothing	(200)
Household Management	(200)
Elementary Applied Science	(100)
General Methods in Household Science	(100)

The standing of candidates in the subjects of Part I will be determined by the sessional records and the final written examinations.

The sessional records, to which shall be allotted one-half the maximum value assigned above to each subject, shall consist of the daily credits and of the results of oral, written, and practical tests given throughout the session.

The final written examinations, to which shall be allotted the remaining half of the maximum value assigned above to each subject, shall include the following papers:

- Foods, 2 papers.
- Clothing, 2 papers.
- Household Management, 2 papers.

COURSES IN HOUSEHOLD SCIENCE—*Continued.*

Elementary Applied Science, 1 paper.

General Methods in Household Science, 1 paper.

The pass standard in Part I shall be 50% of the marks assigned to each subject.

(b) Part II.

The standing of candidates in Part II shall be determined wholly by the sessional records. For this purpose the maximum value assigned to practice lessons shall be 300, and to observation lessons, 100.

The pass standard in Part II shall be 60% of the aggregate of the marks for the practice lessons and for the observation lessons respectively.

(2) (a) Candidates who pass in Part II and fail in not more than two subjects of Part I will be exempted from further attendance.

(b) All other candidates who fail to obtain the necessary final standing will be required to attend another session, beginning after the Christmas vacation.

(3) (a) Candidates who are exempt from attendance under (2) (a) above may complete their standing for a certificate by taking, at one annual examination, or, separately, at different annual examinations the examination, written or practical or both, in the subject or subjects in which they failed.

(b) The pass standard for candidates not in attendance will be the same as that for candidates in attendance, but no allowance will be made for sessional work in the case of those not in attendance.

## CERTIFICATES

A candidate who takes the subjects and passes the examinations therein prescribed above shall be entitled to an Interim Ordinary Household Science certificate which shall be valid in these subjects in any Public, Separate, or High School of the Province, and will be made Permanent on the report of the Inspector or Inspectors concerned that the holder thereof has taught successfully the subjects thereof for at least two years.

The Interim Certificate may be renewed under conditions satisfactory to the Minister.

## COURSES FOR DEGREES IN PEDAGOGY

The Ontario College of Education offers courses of instruction for the degrees in Pedagogy during the regular College Sessions and during Summer Sessions.

## DEGREES OF BACHELOR OF PEDAGOGY (B.PAED.)

The degree of Bachelor of Pedagogy (B.Paed.) will be awarded under the following conditions:

1. The candidate shall hold an approved degree in Arts, Science, Agriculture, Engineering, or Commerce.

2. The candidate shall be in attendance at the Ontario College of Education during two regular College Sessions or three Summer Sessions. A High School Assistant's, or First Class, or Second Class certificate valid in Ontario or a regular course in an approved training school for teachers will be accepted in lieu of attendance during one of these regular sessions or one of the Summer Sessions.

3. The course shall consist of three subjects to be taken in any order and to be selected from the following:

Group A.—Science of Education, Educational Psychology.

Group B.—History of Education, Educational Administration.

Not more than two of these subjects shall be taken during a regular Session and not more than one during a Summer Session.

Candidates who, under Section 2 above, are exempted from attendance during one regular Session or one Summer Session will be exempted also from the instruction and examination in one of the three subjects, provided that the degree be awarded only to candidates who have taken the instruction and examinations in at least one subject in each of the two groups of subjects.

4. The examinations shall be held in May at the University of Toronto or in any other locality in the Province chosen by the candidate and approved by the Senate and under a presiding examiner appointed by the Senate, provided the candidate thereat defray the cost of the local examinations. The candidate shall send notice not later than the 15th day of March of his intention to take the examinations and of the locality he has chosen for such examinations.

5. The fee for registration is \$5. The fee for the Summer Session is \$10, the fee for the regular Session, which shall include the examination and library fees, is \$25. The fee for examination is \$3 for each subject. The fee for the degree is \$20. All fees shall be paid to the Bursar with the application for registration or examination, as the case may be.

6. The standard for a Pass degree shall be 60 per cent. of the marks assigned to each subject. The candidate who obtains 60 per cent. of the marks of each subject, and 66 per cent. of the aggregate of marks, shall be awarded a degree with Second Class Honours. The candidate who obtains 60 per cent. of the marks of each subject and 75 per cent. of the aggregate of marks shall be awarded a degree with First Class Honours. On the report of the instructors concerned, a maximum of 40 per cent. of the marks in any subject may be assigned to the term work of the candidate.

7. Subjects of Instruction and Examination.

(a) The Science of Education, including a study of the philosophical, ethical, and sociological bases of education. (Two papers.)

(b) Educational Psychology. (Two papers.)

(c) The History of Education in Western Europe and North America in modern times, with special reference to Ontario, Great Britain, and the United States. (Two papers.)

(d) Educational Administration in Great Britain, the United States, France, and Germany, with special reference to the administration and organization of education in Ontario. (Two papers.)

DEGREES OF DOCTOR OF PEDAGOGY (D.PAED.)

The degree of Doctor of Pedagogy (D.Paed.) will be awarded by the School of Graduate Studies under the following conditions:

1. The candidate shall hold an approved degree in Arts or Science or in the applied sciences of Agriculture, Engineering, or Commerce.

2. The candidate shall be in attendance at the Ontario College of Education during three regular College Sessions or four Summer Sessions. A High School Assistant's, First Class, or Second Class certificate valid in Ontario, or a regular Course in an approved training school for teachers will be accepted in lieu of the attendance during one of these regular Sessions or one of the Summer Sessions.

3. The Course shall consist of the four subjects and a thesis as defined in Sections 5 and 7. The subjects may be taken in any order, provided that not more than two be taken in any regular Session and not more than one in any Summer Session. Candidates who, under Section 2, are exempted from attendance during one regular Session or one Summer Session will be exempted also from the instruction and examination in one of the four subjects.

4. The examinations shall be held at such times and under such conditions as to date of application, place of examination, percentages, term work, etc., as obtain with the Bachelor's degree.

5. The candidate, after passing the prescribed examinations, shall also submit on or before March 1st a thesis on some educational topic selected with the approval of the Ontario College of Education. In valuing this thesis literary excellence, as well as the discussion of the subject, will be taken into account. After the examiners have reported in favour of the candidate's examinations and thesis, and before the degree of D.Paed. is conferred, the candidate shall furnish the Secretary of the School of Graduate Studies with four copies of the thesis, and shall make arrangements to publish the Thesis or an approved abstract thereof.

6. The fee for registration, if not already registered in the B.Paed. Courses, is \$5. The fee for the Summer Session is \$10; that for the regular Session, which shall include the examination and library fees, \$25. The fee for examination is \$3 for each subject. The fee for the degree is \$25. All fees shall be paid to the Bursar with the application.

7. Subjects of Instruction and Examination.

(a) The Science of Education, including a study of the philosophical, ethical, and sociological bases of education. (Two papers.)

(b) Educational Psychology. (Two papers.)

(c) The History of Education in Western Europe and North America in modern times, with special reference to Ontario, Great Britain, and the United States. (Two papers.)

(d) Educational Administration in Great Britain, the United States, France, and Germany, with special reference to the administration and organization of education in Ontario. (Two papers.)

#### EDUCATION FELLOWSHIPS

Four fellowships of not less than \$500 each are offered annually to teachers who undertake to pursue graduate work in Education leading to the degree of D.Paed. or Ph.D. On the recommendation of the instructors concerned these fellowships may be renewed for a second year. Applications for these fellowships should be addressed to the Dean of the Ontario College of Education not later than June 1st of each year.

---

FACULTY OF FORESTRY

---

## DEGREES IN FORESTRY

The degrees in Forestry are Bachelor of the Science of Forestry (B.Sc.F.), and Forest Engineer (F.E.).

The satisfactory completion of the four-year course of instruction presented leads to the degree of Bachelor of the Science of Forestry.

The degree of Forest Engineer is granted to a graduate holding the degree of B.Sc.F., who, after three years' employment in forestry work, presents an acceptable thesis, the details to be arranged and the subject to be previously approved by the Faculty.

## ENTRANCE REQUIREMENTS

A candidate for admission to the First Year in the Faculty of Forestry must produce satisfactory certificates of good character and of having completed the seventeenth year of his age on or before the first of October of the year in which he proposes to register.

He must also present certificates giving him credit in the following subjects of Pass and Honour Matriculation:

### PART I—PASS MATRICULATION

ENGLISH (Literature and Composition)

HISTORY (British and Ancient)

MATHEMATICS (Algebra and Geometry)

Any three of:

LATIN (Authors and Composition)

GREEK (Authors and Composition)

FRENCH (Authors and Composition)

GERMAN (Authors and Composition)

SPANISH (Authors and Composition) *or*

ITALIAN (Authors and Composition)

EXPERIMENTAL SCIENCE (Physics and Chemistry) *or*

AGRICULTURE (Parts I and II)

### PART II—HONOUR MATRICULATION

ENGLISH (Literature and Composition)

MATHEMATICS (Algebra, Geometry and Trigonometry)

Any one of:

LATIN (Authors and Composition)

FRENCH (Authors and Composition)

GERMAN (Authors and Composition).

In selecting the options it is recommended that students take French or German in Part II.



Admission may also be secured by candidates who (1) possess a degree in Arts from any Canadian, British or American university of approved standing; (2) come from other institutions whose certificates are recognized by the University of Toronto as equivalent to the above entrance requirements, and will be accepted *pro tanto*; or (3) have completed a year, or the examinations for the year, with satisfactory standing, in the Faculties of Arts, Medicine or Applied Science.

In addition to the academic requirements, a robust physique and good eyesight are essential in the practice of the profession, and candidates markedly deficient in these will be advised not to proceed. Deficiency in eyesight will be found a particular handicap in future practical employment.

## REGISTRATION AND ENROLMENT

The twenty-first session of the Faculty of Forestry of the University of Toronto will open at the Forestry Building, 41 St. George St., on Tuesday, September 27, 1927.

Applications for admission in duplicate, together with matriculation or equivalent certificates, should be forwarded to the Registrar of the University, Simcoe Hall, Toronto, Canada, at as early a date as possible.

Students must complete their registration in person on or before the first day of the session, September 27th. On the same or the preceding day students will enrol with the instructors in their various courses.

Students who have not complied with the regulations for registration and enrolment may be admitted only upon petition to the Faculty and for good reasons. They may be refused enrolment with classes unless the head of the department is satisfied that they are able to go on with the class. A charge will be made for late registration.

## FEES

### (1) ANNUAL COMPOSITE FEE, TUITION, ETC.

(a) First, Second, Third and Fourth Years. Annual fee for regular students in Forestry, including instruction, main library, laboratory supply, and one annual examination.

If paid in full in October.....\$125.00  
By instalments:—

First instalment, if paid in October.....	63.00
Second instalment, if paid in January.....	64.00

(b) The fee for occasional students is \$15.00 for each course taken.

All fees are payable in advance at the Bursar's office in Simcoe Hall.

After October 31st, a penalty of \$1.00 per month will be imposed upon composite fees until the whole amount is paid. In the case of payment by instalments the same rule as to penalty will apply. Students attending the Forestry School Camp will be allowed until November 15th to pay fees.

A student may not be admitted to any of the University lectures or laboratories who is in arrears for his fees.

A student is responsible for complete fees for the year, even for partial attendance, unless he submits a written statement of his withdrawal to the Dean.

Any candidate for a degree must pay full fees for the year in which he is in attendance upon any one or more courses.

#### (2) OTHER FEES

Supplemental Examinations.....	\$10 00
Admission ad eundem statum.....	10 00
Degree of B.Sc.F.....	10.00
Degree of F.E.....	20.00
Hart House Fee.....	\$8.00

Every male student in attendance, proceeding to a Bachelor's degree in the Faculty of Forestry, is required to pay to the Bursar before December 1st the annual fee of eight dollars for the maintenance of Hart House. If this fee is not paid by the above date a penalty of two dollars will be imposed, making the total fee ten dollars.

Students' Administrative Council Fee.....	\$4.00
---	--------

Every male student in attendance proceeding to a Bachelor's degree in the Faculty of Forestry is required to pay to the Bursar at the time of the entry of his name with the Registrar the annual fee of four dollars for the maintenance of the Students' Administrative Council.

Men's Physical Training Fee.....	\$5.00
----------------------------------	--------

Every male student in attendance proceeding to a Bachelor's Degree in the Faculty of Forestry is required to pay to the Bursar the annual Physical Training fee of \$5.00 at the opening of each session in which Physical Training is compulsory for that student.

Supplementary Physical Training Fee.....	\$10 00
--	---------

Every student who has neglected to complete satisfactorily the course in Physical Training of the First or Second Year and who must take this work during the Second or Third Year respectively of his course, will be required to pay to the Bursar at the opening of the session a supplemental fee of \$10.00 in addition to the prescribed Physical Training fee.

#### *Foresters' Club and Athletic Club*

Annual fee, Foresters' Club.....	\$3.00
Fee, Forestry Athletic Club.....	2.50

## EXAMINATIONS AND STANDING

No student will be allowed to write on the annual examinations who has not paid all fees and dues for which he is liable. A student who fails to perform the work in his course in a manner satisfactory to his instructors will not be allowed to present himself at the final examinations except by special permission of the Council of the Faculty.

The standard for pass in these examinations in all courses, whether taken in the Faculty of Forestry or any other Faculty, is 50 per cent. of the marks for each subject.

In making up the final standing of each candidate much consideration will be given to the character of his work through the term, including attendance, laboratory and field work, reports and term examinations.

Candidates who *fail* at the annual examinations *in more than two subjects* cannot proceed to the next year unless they have attained at least 70 per cent. on the average in all other subjects, when their case will be specially considered.

Candidates who fail in one or two subjects at the annual examinations, only one of which may be a forestry subject, may be allowed to take supplemental examinations in such subjects in January. Candidates are required to send to the Secretary of the Faculty not later than November 30, notice in writing of their intention to take such examinations, and at the same time the fee of \$10 must be paid to the Bursar, and no student will be allowed to write who has failed to pay this fee. If a candidate fail to pass a supplemental examination in a subject which is not basic to other subjects, he may carry it upon petition until the next regular annual examination.

A student failing in laboratory work must repeat the same. A student failing in three subjects or more than one forestry subject will be obliged to repeat the year.

No candidate for a degree will be allowed to pass into the next higher year who has not fulfilled all the requirements of the next lower year.

The subject credits are: A equals 75 per cent. or over; B equals 66 to 74 per cent.; C equals 60 to 65 per cent.; D equals 50 to 59 per cent.; E equals below 50 per cent.

The standing awards in each year are: First Class Honours equals 75 per cent. or over; Second Class Honours equals 66 to 74 per cent.; Third Class Honours equals 50 to 65 per cent.; Starred; Failed.

## SCHOLARSHIPS AND BURSARIES

## THE UNIVERSITY OF TORONTO WAR MEMORIAL SCHOLARSHIPS

Four scholarships of the value of \$250 each have been established by the Alumni Federation of the University from the War Memorial Fund to be awarded to students in the Faculties of Applied Science and Engineering and Forestry.

The general basis on which the above scholarships were awarded in 1926-27 was as follows: (a) Standing in course of studies, (b) need of assistance, (c) merit as shown in extra-academic activities—executive, literary, dramatic, athletic, etc., (d) relationship, if any, to active service during the war.

Information regarding this scholarship may be obtained from the Secretary-Treasurer of the Alumni Federation, Room 225, Simcoe Hall, to whom applications for the same must be made not later than February 15th.

#### THE 1851 EXHIBITION SCIENCE RESEARCH SCHOLARSHIP

Forestry graduates are eligible as candidates for the 1851 Exhibition Science Research Scholarship. Information with regard to this is given in the calendar of the Faculty of Arts.

#### THE F. W. JARVIS BURSARIES

Two Bursaries, known as "The F. W. Jarvis Bursaries," of the value of \$50 each, the gift of A. H. Jarvis, Esq., of Ottawa, brother of F. W. Jarvis, to be awarded under the following conditions:

(1) These Bursaries are open only to former students of Ottawa Collegiate Institute (Lisgar Street), who without some such assistance may not be able to carry on their academic courses. (2) They may be awarded at Matriculation or in any year of an undergraduate course in any Faculty of the University. (3) They shall be awarded preferably one to a man and the other to a woman student; but if in any year students of opposite sexes do not apply, both Bursaries may be awarded to men or to women. (4) A Bursary may be held in successive years by the same student and also in conjunction with any scholarship awarded by the University or the federated colleges. (5) The Bursaries shall be awarded by the Senate of the University on the recommendation of a Committee of Award consisting of the President of the University, the Principal of Ottawa Collegiate Institute and the donor; candidates shall make application for the same not later than May 15th on the special form to be obtained from the Registrar.

#### REGULATIONS RELATING TO STUDENTS IN ATTENDANCE

No student will be enrolled in any year, or be allowed to continue in attendance, whose presence is deemed by the Council of the Faculty to be prejudicial to the interests of the University.

Students proceeding regularly to the degree are required to attend the courses of instruction and the examinations in all subjects prescribed for students of their respective standing; and no student will be permitted to remain in the University who persistently neglects academic work.

Unless special permission is granted by the Council, a student who, at the close of two sessions in the University, has failed to secure standing in his year, will not be permitted registration in the Faculty of Forestry.

All interference on the part of any student with the personal liberty of another by arresting him, or summoning him to appear before any unauthorized tribunal of students, or otherwise subjecting him to any indignity or personal violence, is forbidden by the Caput.

No initiation ceremony involving physical violence, personal indignity, interference with personal liberty or destruction of property may be held by the students of any Faculty or College of the University under the penalty of suspension or expulsion.

Any ceremony connected with the reception of the First Year desired by any Faculty or College must be prepared and carried out by a Committee of the Senior Year of the Faculty or College concerned with the approval of a joint committee of the Caput and the Students' Administrative Council. The holding of such ceremonies except with this approval shall constitute a breach of discipline.

Students of the Faculty of Forestry, on the premises of a College or Faculty other than that in which they are registered, shall be subject to the regulations and penalties imposed by the administrative authorities of the premises concerned.

A student who is under suspension, or who has been expelled from a College or from the University, will not be admitted to the University buildings or grounds.

The constitution of every University society or association of students in the Faculty of Forestry and all amendments to any such constitution must be submitted for approval to the Council of the Faculty. All programmes of such societies or associations must, before publication, receive the sanction of the Council of the Faculty through the President. Permission to invite any person not a member of the Faculty of the University to preside at or address a meeting of any society or association must be similarly obtained.

The name of the University is not to be used in connection with a publication of any kind without the permission of the Caput.

The Students' Administrative Council has been entrusted by the Caput with supervision of the conduct of the students, and subject to the approval of the Caput, has power, through the Students' Court or otherwise, to deal with violations of the regulations governing conduct.

Any student who may be convicted of having taken part in a parade or procession through the city which has not been authorized by the police authorities, after application by the Executive of the Students' Administrative Council, will be severely disciplined.

## PHYSICAL TRAINING

By order of the Board of Governors each male student proceeding to a degree must take Physical Training in the first and second years of his attendance. In each session in which Physical Training is compulsory he must first undergo a medical examination by the Director of the University Health Service and must then register for Physical Training at the office of the Athletic Association in Hart House. Students of all years who wish to take part in any form of athletics or physical exercise, must first undergo a medical examination by the Director.

It is specially desired that students obtain training in swimming.

## CURRICULUM

The regular course leading to the degree of Bachelor of the Science of Forestry is a four-year course, the first two years of which are mainly devoted to the study of the fundamental subjects, and the last two years are mainly occupied with forestry subjects.

The courses are distributed through the four years as scheduled below; the number after a subject refers to the description of courses farther on where the content of the course is given. The work is stated in time per week.

## I YEAR

1. *Elementary Forestry* (1a). One lecture through the session.
2. *Descriptive Dendrology* (2). Three hours laboratory work and Saturday field work first term; six hours laboratory work second term.
3. *Tutorial Class* (9). Two hours laboratory work through the session.
4. *French* (31a) or *German* (32). Two lectures through the session.
5. *Elementary Physics* (18). Two lectures and two hours laboratory work through the session.
6. *Elementary Zoology* (19). Two lectures and six hours laboratory work second term.
7. *Elementary Botany* (21). Two lectures and six hours laboratory work first term.
8. *Elementary Chemistry* (23). Two lectures and two hours laboratory work through the session.
9. Employment in the field during the summer vacation in forestry work.

## II YEAR

1. *Elementary Forestry* (1b). One lecture through the session.
2. *Biological Dendrology* (3). Two lectures and four hours laboratory work through the session.
3. *Forest Mensuration* (10a). Two lectures through the session; six hours laboratory work first term, three hours laboratory work second term.

4. *French* (31b) or *German* (32). Two lectures through the session.
5. *Elementary Organic Chemistry* (24). Two lectures through the session.
6. *Elementary Geology* (26). Two lectures through the second term.
7. *Mineralogy* (28). Two lectures and one hour laboratory work first term; two hours laboratory work second term.
8. *Surveying* (29a). One lecture through the session and six hours field work first term.
9. *Engineering Drawing* (30a). Six hours laboratory work second term.
10. Employment in the field during the summer vacation in forestry work.

## III YEAR

1. *Silvics* (4). Two lectures through the session.
2. *Silviculture* (6). Three lectures first term; two lectures second term; fifteen hours laboratory work. One week of field work.
3. *Forest Utilization* (11a). Three lectures through the session. Ten days in logging camp.
4. *Forest Mensuration* (10b). One lecture and three hours laboratory work through the session.
5. *French* (31c) or *German* (32). Two lectures through the session.
6. *Economics* (16). Two lectures through the session.
7. *Commercial Law* (17). One lecture through the session.
8. *Pleistocene Geology and Physiography* (27). One lecture through the session.
9. *Surveying* (29b). One lecture through the session and nine hours field work first term.
10. *Engineering Drawing* (30b). Nine hours laboratory work second term.
11. Employment in the field during the summer vacation in forestry work.

## IV YEAR

1. *Forest Geography* (5). Two lectures through the session.
2. *History of Forestry* (15). One lecture through the session.
3. *Timber Physics and Technology* (8). Two lectures and six hours laboratory work first term; one lecture second term.
4. *Forest Utilization* (11b, c). Two lectures through the session and visits to wood-using plants.
5. *Forest Protection* (7). Two lectures through the session. One week of field work.
6. *Forest Administration* (14). Two lectures through the session.
7. *Forest Organisation* (12). One lecture through the session; ten seminars second term. Three weeks of field work.
8. *Forest Finance* (13). One lecture through the session.
9. *Forest Entomology* (20). Two lectures and four hours laboratory work second term.
10. *Forest Pathology* (22). Two lectures and four hours laboratory work second term.
11. *Cellulose Industries* (25). One lecture through the session.

## FIELD WORK

The following field work in addition to the summer employment is required for the degree.

*Third Year:* The Third Year students are required to spend a week or ten days of the Christmas vacation in lumber camps for the purpose of becoming acquainted with the methods of their management. A report on the results of such inspection visits will be required. The trip costs about \$50.

At or near the end of the spring term the Provincial Forest Station at St. Williams, Ontario, will be visited for a week by the Third Year students in connection with the course in Silviculture. The trip costs about \$20.

*Fourth Year:* Six weeks at the beginning of the Fourth Year will be spent at the Forestry School Camp in Algonquin Park. During this time timber estimating, tree measurements, studies of rate of growth, forest description and forest survey, the making of working plans, and other practical woods work will occupy the students. The students must report at the Camp on September 27, 1927. The return railway fare from Toronto is about \$25, and board is furnished at cost at approximately \$1.25 per day.

DESCRIPTION OF COURSES GIVEN IN THE  
FACULTY OF FORESTRY

1a and 1b. *Elementary Forestry.* The course is intended to give the student an understanding of the general principles of forestry as a science, an art, a business and a state policy, with applications to Canadian conditions. 25 lectures, first year; 25 lectures, second year. Professor Howe.

2. *Descriptive Dendrology.* A descriptive systematic study of the native forest trees and the more commonly cultivated species, laying special stress on the characteristics which lead to the recognition of the species. 115 hours laboratory work, with field work, first year. Mr. Hosie.

3. *Biological Dendrology.* Life history, development and growth of trees; relation to site factors; wood structure. 50 lectures, 100 hours laboratory work, second year. Professor White.

4. *Silvics.* The life history of the forest; the laws of invasion and succession; the influence of environmental factors; a description of the forest types of Canada. Field practice in recognizing forest types at the Forestry School Camp. 50 lectures, third year. Professor Howe.

5. *Forest Geography.* The geographical distribution, botanical composition, ecological characteristics of the forests of the world in relation to climatic and edaphic conditions. The course is introduced by a brief presentation of the laws and conditions of the atmosphere that determine the weather and climate. 50 lectures, fourth year. Professor Howe.



6. *Silviculture*. Silvicultural characteristics of Canadian tree species; principles underlying forest production and improvement; methods of regeneration and nursery practice; identification of tree seeds and seedlings. 75 lectures; 15 hours laboratory work; one week of field work, third year. Professor White.

7. *Forest Protection*. (a) Methods of guarding against injury to forests by wind, frost, insects, trespass and other miscellaneous injurious agents; protection of forests from fire, organization of forest protection forces, co-operative forest protection in Canada, equipment; construction and use of forest improvements, roads, trails, telephone lines, lookout systems, aerial patrol, fire-fighting. 50 lectures. (b) Construction, operation and maintenance of forest telephone lines, use of heliographs, flags, signal lanterns and wireless telephones in forest protection, signal codes, relation of system of communication to the organization of protection forces and the detection and suppression of forest fires. One week of lectures and field work at Forestry School Camp, fourth year. Professor Millar.

8. *Timber Physics and Technology*. Wood structure with a view to identification of the different woods: physical and mechanical properties; relation of properties. Technical properties and uses of Canadian woods and of their competitors, and of the commonly imported tropical woods. Statistical study of the lumbering and pulp and paper industries. 30 lectures, 75 hours laboratory work, fourth year. Professor White.

9. *Tutorial Class*. Practice in elementary methods of office and field work. 50 hours laboratory work, first year. Professor Dwight.

10. *Forest Mensuration*. (a) Methods of ascertaining the contents of logs and trees, scaling, tree form, construction and use of volume tables, timber estimating. 50 lectures, 50 hours laboratory work, 40 hours field work, second year.

(b) Methods of measuring the growth and yield of trees and stands. 25 lectures, 75 hours laboratory work, third year. Professor Dwight.

11. *Forest Utilization*. (a) Organization of logging operations, methods of logging employed in various regions of Canada and the United States, minor woods industries related to lumbering, logging regions of Canada. 75 lectures, and ten days field work in a logging camp, third year.

(b) Equipment and operation of lumber manufacturing plants, pulp and paper mills, wood distillation, cooperage and box making, veneers and other important wood-using industries. 25 lectures, and trips to typical wood-using plants. (c) Seasoning and grading of lumber, timber preservation, fire proofing; the lumber industry, customs and usages, lumber shipping and inspection, lumber associations, timber appraisal. 25 lectures, and occasional visits to local lumber yards, dry kilns and timber-treating plants, fourth year. Professor Millar.

12. *Forest Organization*. (a) Principles and methods underlying the preparation of working plans for continuous wood and revenue production.

35 lectures. (b) Field practice in timber estimating, tree measurements, studies of rates of growth, forest description and forest survey, the making of working plans, and other practical woods work. Three weeks in Forestry School Camp, fourth year. Professor Dwight.

13. *Forest Finance*. Methods of ascertaining money value of forest growths and application of the principles of finance to forest management. 25 lectures, fourth year. Professor Dwight.

14. *Forest Administration*. Fundamental principles of administrative organization, selection and training of a forest personnel, civil service commissions, forest administrative organizations of Canada. Laws and regulations under which forests are administered and protected by the Dominion Government and the various Provinces of Canada. Forest Acts and Regulations of the Federal Government and the Provinces are used as texts. 50 lectures, fourth year. Professor Millar.

15. *History of Forestry*. Historical development of the economic and technical features of modern forestry at home and abroad. 25 lectures, fourth year. Professor Howe.

## COURSES GIVEN IN OTHER FACULTIES

16. *Economics*. A general introduction to the study of economics, covering the elements of economic theory, a sketch of economic history, and of important social changes and movements. 50 lectures, third year. Mr. Bladen.

17. *Commercial Law*. General principles of the law of contracts. Rules relating to parties to contract; agency, partnership and companies. General view of the following: sale of goods, negotiable instruments, powers of banks, relation of banker and customer, insurance, carriage of goods, suretyship and guarantee, bills of sale and chattel mortgages, bankruptcy and insolvency. 25 lectures, third year. Professor MacKenzie.

18. *Elementary Physics*. A course in general physics including forces, their resultants and compounds, work, levers, machines, mechanical advantage and efficiency, velocities and accelerations, kinetic and potential energy, elasticity, friction, fluid pressure, specific gravity, barometers, surface tension, molecular theory, osmotic pressure, colloids. Thermometers, expansions, calorimetry, change of state, vapours, hygrometry, propagation of heat. Electrical units, Ohm's Law, electrolysis, cells, induced currents and applications, conduction of electricity in gases. X-rays. Nature of light, wave length, colour, energy, absorption and emission, reflection, refraction, spectrum analysis, polarised light. 50 lectures, 50 hours laboratory work, first year. Professor McLennan, Professor Satterly, Professor Gilchrist, Professor McTaggart.

19. *Elementary Zoology*. A course on the nature of the animal organism and in illustration of the elementary principles of zoology. 25 lectures, 75 hours laboratory work, first year. Professor Coventry.

20. *Forest Entomology*. A course on the structure, life history, and classification of forest insects. 25 lectures, 50 hours laboratory work, fourth year. Professor Walker.

21. *Elementary Botany*. A course on the life, structure, and classification of plants. 25 lectures, 75 hours laboratory work, first year. Professor Thomson.

22. *Forest Pathology*. A course on the diseases of plants, especially of trees. 25 lectures, 50 hours laboratory work, fourth year. Professor Faull.

23. *Elementary Chemistry*. An introductory course in general chemistry with experimental illustrations; with a short course in elementary quantitative chemistry. 50 lectures, 50 hours laboratory work, first year. Professor Kenrick.

24. *Elementary Organic Chemistry*. A course of experimental lectures on the systematic classification of the aliphatic compounds and some of the more common aromatic compounds. 50 lectures, second year. Professor Allan.

25. *Cellulose Industries*. A course on wood distillation, the manufacture of pulp and paper, artificial silk, celluloid, etc. 25 lectures, fourth year. Professor Bain, Mr. Crossley.

26. *Elementary Geology*. Chiefly historical geology with special reference to Canadian formations. 25 lectures, second year. Professor Parks.

27. *Pleistocene Geology and Physiography*. The formation and distribution of the drift deposits of North America, with brief references to other regions. Glacial, Interglacial, and Postglacial beds are described, changes of climate are discussed with their probable causes, and the economic features of the clays, sands, and gravels are pointed out. The surface forms of the earth, with the geological factors which have produced them. The broad features of the earth, its plains, tablelands, hills, valleys, mountains, oceans, rivers, and lakes are discussed in a general way; methods of topographical surveying and mapping are referred to, and the chief physiographic areas of Canada are described. 25 lectures; third year. Professor MacLean.

28. *Mineralogy*. A brief introduction to the study of minerals and rocks. Determination of minerals by inspection and by means of physical tests; study of common rock types and their identification. 25 lectures, 40 hours laboratory work, second year. Professor Parsons, Professor Thomson.

29. *Surveying*. (a) The lecture course includes the general principles; surveying with the chain, the compass and chain and the transit and chain,

and level, the applications of trigonometry to inaccessible heights and distances; mensuration of surfaces, co-ordinate surveying, division of land, etc. The field work comprises testing chains; practice in chaining; a complete survey of a piece of land with the chain and transit; keeping of field notes; the use of the transit and compass in surveying closed figures and traverse lines and in ranging straight lines; plotting by latitudes and departures, and otherwise computing areas. Instrumental work with level, including roadway improvement. 25 lectures, 75 hours field work, second year. Professor Crerar.

(b) The course of lectures takes up boundary line traverses, stadia topographic surveying, plane table surveying including the two and three point problem for orientation, use of Lugeol micrometer, the simple circular curve with problems, cross sectioning, triangulation, adjustments of the transit and the Dumpy and Wye levels, etc. The field work embraces all adjustments of the transit and level, minor problems in triangulation boundary line traversing, stadia topographic surveying, plane table problems, etc. 25 lectures, 100 hours field work, third year. Professor Banting.

30. *Engineering Drawing.* (a) Copying from the flat, lettering, topography, and the plotting of original surveys. 75 hours laboratory work, second year.

(b) Lettering, topography, and the plotting of original surveys. 100 hours laboratory work, third year. Professor Cockburn, Professor Wright.

31. *French.* (a) Reading of scientific texts; pronunciation, practice in oral French. 50 lectures, first year. Professor Jeanneret.

(b) Reading of modern texts and Forestry journals; special classes in oral work, conducted entirely in French. 50 hours, second year. Professor Andison.

(c) Reading of modern texts and Forestry journals; special classes in oral work, conducted entirely in French. 50 hours, third year. M. Michel Poirier.

32. *German.* Reading of texts in scientific German and sight translation. 50 lectures, first year; 50 lectures, second year; 50 lectures, third year. Professor Needler, Professor Fairley.

## OPENINGS FOR FORESTERS

To meet the many inquiries of students contemplating the choice of forestry as a profession the following statements may serve: ~

Openings for foresters may be found in four or five directions, namely, government employ, private employ, private enterprise, teaching, and other business.

The Dominion Forest Service, which has charge of the Dominion timber lands in Alberta, Saskatchewan, Manitoba, part of British Columbia, and the unorganized territories, is employing graduates to do the technical work in exploring and classifying lands for forest reservations, surveying, mapping and determining contents of such reservations, organizing a forest fire service, controlling the grazing, timber sales and logging, and generally providing for an administration of forest reservations, of which there are now a dozen, under supervisors. These will have to work out the details of a forest management. The Forest Service maintains large nurseries from which tree material is distributed for planting in the prairies; a staff of experts attend to the growing and distribution of tree seedlings, and inspect the planting. Other field work with the Dominion Forest Service consists in silvicultural investigations. Statistical and technological investigations are carried on and results published at the main office in Ottawa and its Forest Products Laboratories. Twenty-one of our graduates are employed by the Dominion Forest Service.

The Provincial Forestry Branch of Ontario has charge of about 100,000,000 acres of forest lands and these are being gradually organized into districts for administrative purposes. The Branch maintains its main Forest Station and nursery at St. Williams, in Norfolk County, with smaller Forest Stations at Orono, Durham County, and at Midhurst, Simcoe County. At St. Williams there are extensive plantations. The Province has developed about forty municipal and county forests, varying in size from a few acres to several thousand acres in extent. The Province is inaugurating an extensive reforestation programme for the waste lands in which eventually thousands of acres will be planted and this will require an increasing number of men trained in silvicultural work. At present the Provincial Forestry Branch employs twenty-six graduates of the School.

The Quebec government has for some time organized and developed a forest service, but it provides its own technical men.

A number of paper manufacturing companies have for some years availed themselves of the services of foresters, to survey, map and plan operations of their forest properties. Timber limit holders have employed such for similar purposes, and the time is not far distant when there will be a more general development in this direction. Thirty-eight graduates are in the employment of pulp and paper companies, lumber companies and allied industries.



---

FACULTY OF MUSIC

---

## DEGREE OF BACHELOR OF MUSIC

The degree of Bachelor of Music (Mus. Bac.) will be conferred by the University of Toronto upon students of music, on compliance with the requirements of the curriculum in music which may from time to time be prescribed by the Senate.

### MATRICULATION

For admission to the Faculty of Music a candidate will be required to present certificates giving him credit in the following subjects of Pass Matriculation:

LATIN (Authors and Composition)

ENGLISH (Literature and Composition)

HISTORY (British and Ancient) *or*

BRITISH HISTORY and MUSIC

MATHEMATICS (Algebra and Geometry)

Any two of

GREEK (Authors and Composition)

FRENCH (Authors and Composition)

GERMAN (Authors and Composition)

SPANISH (Authors and Composition) *or*

ITALIAN (Authors and Composition)

EXPERIMENTAL SCIENCE (Physics and Chemistry) *or*

AGRICULTURE (Parts I and II).

The courses of study prescribed in each of these subjects will be found in the Curriculum for Matriculation, a copy of which may be obtained on application to the Registrar of the University.

Special application for Matriculation may be dealt with by the Senate.

### REGISTRATION

Every student shall, in each year of his course, register his name with the Secretary of the Faculty of Music not later than the first of November.

After the first of November registration can be effected only by petition to the Faculty and on payment of a fine of One Dollar a month for each month after October.

### UNDERGRADUATE COURSE

In addition to Matriculation the candidate must have passed three examinations before the degree of Bachelor of Music shall be granted.



## FIRST YEAR

1. Harmony in three and four parts.
2. Counterpoint in two and three parts. No three part counterpoint with combined species will be required, but candidates will be required to add one part to a Canto Fermo in the fifth species, and to write double counterpoint at the 15th.
3. The History of Music from the rise of the Netherland School to the death of Bach and Handel, and excluding composers who died at a later date.
4. The following works will be studied in discussion groups, and a special knowledge of them required for the examination: PALESTRINA: Missa "Aeterna Christi Munera"; BENET: All creatures now are merry minded; PURCELL: "Golden" Sonata; J. S. BACH: Cantata, "God's Time is best."

## SECOND YEAR

1. Harmony in not more than four parts, including simple part-writing for voices and for string quartet.
2. Counterpoint—strict and free in not more than four parts. Free counterpoint will include simple contrapuntal treatment of a given hymn-tune.
3. Double Counterpoint at the octave, 10th, 12th and 15th. Canon in two parts at the octave, with an independent part. Fugal exposition in not more than four parts to be written on a given subject.
4. The History of Music subsequent to the time of Bach and Handel, including all composers whose deaths occurred at a date later than 1760.
5. Musical Form as far as the simple forms and analysis of the musical sentence. Candidates may be required to extend a given phrase to form a complete sentence.
6. The following works will be studied in discussion groups, and a special knowledge of them required for the examination: MOZART: String Quartet in G; BEETHOVEN: "Kreutzer" Sonata, op. 47; SCHUBERT: The Miller's lovely Daughter (Song Cycle).
7. A *viva voce* examination in general musical knowledge. Students will also be required to read at sight from the score of a simple string quartet.

An equivalent test will be arranged for singers and players upon orchestral instruments.

## FINAL YEAR

1. Harmony in not more than five parts, including some original work.
2. Counterpoint, strict and free, in not more than five parts.
3. A fugue in not more than four parts for strings or voices, to be written in the examination room.
4. A general survey of the History of Music from the earliest times to the present day. Students are recommended to study H. C. Colles' "The Growth of Music" and as many as possible of the scores listed therein; also Lavignac's "Music and Musicians." (See also list on page 13).
5. Musical Form.
6. Orchestration.
7. A *visa voce* examination at which the candidate will be asked questions of a general nature, and in particular required:
  - (a) To show a critical and analytical knowledge of the following scores: PURCELL: Dido and Aeneas (vocal score, Ed., Dent); SCHUBERT: Symphony in C (full score); R. STRAUSS: Don Juan (full score).
  - (b) To play any one of the preludes and fugues from Bach's "Wohltemperirtes Klavier."
  - (c) To transpose a simple piece at sight.
  - (d) To read at sight from a full score of a date not later than Mendelssohn.
  - (e) To modulate at the keyboard.

Tests equivalent to (b), (c) and (d) will be arranged for singers or players upon orchestral instruments.

8. Each candidate shall submit an original composition of a length sufficient to occupy not less than fifteen minutes in performance. This may be *either*:

- (a) A work for Chorus and String Orchestra (to which the candidate may, at his own option, add wind instruments) containing a substantial proportion of contrapuntal writing, and some writing for solo voice or voices; *or*:
- (b) A string quartet in three movements, at least one of which shall be written in Sonata form.

The work must exhibit structural independence and artistic interest and will not be regarded as sufficient solely on the ground that it is free from technical errors.

An exercise that has once been submitted and rejected may not be submitted a second time in amended form unless the Faculty shall have expressly permitted the incorporation, in a new exercise, of a portion of a previous one.

8. (c) In lieu of the above composition, candidates may present a thesis of not more than five thousand words on some subject connected with musical history or criticism, the subject to be submitted to and approved by the Faculty of Music at the beginning of the academic year.

In awarding marks for this thesis the examiners will require that it show not only accuracy of statement but some literary style.

The composition or thesis must be sent to the Secretary of the Faculty not later than the first of April, accompanied by a declaration that it is the candidate's own unaided work.

Candidates for the degree may defer presenting this composition or thesis until a subsequent annual examination, in which case the fee for the examination shall be ten dollars (\$10.00).

In the case of those candidates who have obtained Licentiate standing in the University of Toronto or in the Toronto Conservatory of Music and who were registered in the Faculty of Music prior to the academic year 1926-27 the above 8 (a) (b) and (c) will not be exacted, but there will be required instead a short original composition, to occupy not less than seven minutes in performance, in one of the following forms:

(a) A song for solo voice with pianoforte accompaniment.

(b) A four-part vocal composition.

(c) An instrumental composition (other than a Dance) for the Piano-forte or Organ, or for any Stringed or Wind Instrument with Pianoforte or Organ Accompaniment.

Provided always that the aforesaid composition shall be submitted not later than the first of April in the year 1930.

The Senate may admit *ad eundem statum* undergraduates of other Universities after due inquiry as to the requirements demanded by the institutions in which the candidates obtained their standing.

## EXAMINATIONS

The examinations will take place at times to be fixed by the Senate.

Applications accompanied by the proper fee must be transmitted to the Secretary of the Faculty before the fifteenth of March. (Cheques should be made payable to the University of Toronto.)

The total number of marks necessary to pass on any subject is 60; second class honours, 70; first class honours, 80; maximum, 100.

## FEES

Matriculation.....	\$10.00
Registration and Lecture Fees (Annual).....	\$5.00 each 10.00
Each examination subsequent to matriculation.....	10.00
For admission <i>ad eundem statum</i> .....	10.00
Degree of Mus. Bac.....	20.00
Lecture Fee for Occasional Students, \$2.00 for each subject, or, covering all subjects .....	5.00

## SUGGESTED LIST OF TEXT-BOOKS

*Rudiments and Harmony:*

- Musical Rudiments—Leo Smith (Boston Music Co.).  
Rudiments of Music and Elements of Harmony—Albert Ham (Novello).  
Elementary Harmony, Books i, ii and iii—Kitson (Oxford University Press).  
The Evolution of Harmony—Kitson (Oxford University Press).  
Harmony, Parts i, ii and iii—Anger (Boston Music Co.).

*Counterpoint:*

- Students' Counterpoint—Pearce (Winthrop Rogers).  
The Art of Counterpoint—Kitson (Oxford University Press).  
Modern Academic Counterpoint—Pearce (Winthrop Rogers).  
Counterpoint for Beginners—Kitson (Oxford University Press).  
Contrapuntal Technique of the Sixteenth Century—Morris (Oxford University Press).

*Double Counterpoint, Canon and Fugue:*

- Primer of Fugue—Higgs (Novello).  
Fugal Analysis—Prout (Augener).  
Studies in Fugue—Kitson (Oxford University Press).  
Double Counterpoint and Canon—Prout (Augener).  
Double Counterpoint and Canon—Bridge (Novello).

*Form and Composition:*

- Form in Composition—Anger (Boston Music Co.).  
Musical Form—Prout (Augener).  
Composition—Stainer (Novello).  
Musical Composition—Stanford (MacMillan).  
Composition—Corder (Curwen).  
Analysis of Form—Harding (Novello).  
Analysis of Bach's 48 Preludes and Fugues—Illiffe (Novello).  
Outlines of Musical Form—Albert Ham (Novello).

*Orchestration:*

- Primer of Instrumentation—Prout (Novello).  
On scoring for an Orchestra—Vincent (Vincent).  
Choral Orchestration—Cecil Forsyth (H. W. Gray Co.).  
Orchestration—Cecil Forsyth (MacMillan).

*History:*

History of Music—Naumann (Cassell & Co.).

History of Music—Rockstro (Robert Cocks).

Summary of Musical History—Parry (Novello).

Evolution of the Art of Music—Parry (Keegan Paul).

The Growth of Music, Books i, ii and iii—H. C. Colles (Oxford University Press).

Music and Musicians—Lavignac (Henry Holt).

Modern Musicians—Hadden (T. M. Foulis).

Articles in Grove's Dictionary.

Candidates are not restricted to the above list, which is only suggested.  
The paper work is judged irrespective of any particular author or school.

## DEGREE OF DOCTOR OF MUSIC

Candidates for the degree of Doctor of Music must be Bachelors of Music of this or some other recognised university of at least three years' standing. Every candidate shall register his name with the Secretary of the Faculty not later than the first of November.

Candidates must present a musical exercise by the first day of April for submission to the examiners in Music.

The exercise must be of the nature of a cantata, with full orchestral accompaniment, or an original composition in cyclic form, or an orchestral tone poem, and requiring from 30 to 60 minutes for its performance. The cantata must include an overture and parts for one or more solo voices, in addition to choruses.

In addition the candidate must undergo an examination of a more advanced character than is involved in the Mus.Bac. examination in Harmony, Counterpoint, Fugue, Musical Form, Orchestration, and Musical History.

The fee for the examination is fifty dollars, divided as follows: Reading exercise, twenty-five dollars; written examinations, twenty-five dollars.

The fee for the degree is thirty dollars.

The examinations will take place at times to be fixed by the Senate.

Applications accompanied by the proper fee must be transmitted to the Secretary of the Faculty before the first of April. (Cheques should be made payable to the University of Toronto).





---

SCHOOL OF GRADUATE STUDIES

---

## PLAN OF ORGANIZATION OF THE SCHOOL OF GRADUATE STUDIES

The constitution and functions of the School of Graduate Studies are determined by the following statute enacted by the Senate of the University of Toronto:

1. That there shall be established in the University of Toronto a School of Graduate Studies.

2. That there shall be a Council to be known as "The Council of the School of Graduate Studies".

3. That the Council shall consist of the President of the University, the Dean of the School, those members of the university faculties of professorial rank who are conducting or directing work of graduate character, and such others as may be appointed annually by the President. For the purposes of this section all the teaching staffs mentioned in the University Act (R.S.O. 1914, Chap. 279, Sec. 66) shall be included.

4. That the Dean, who shall be Chairman of the Council, and the Secretary of the School shall be appointed by the Board of Governors.

5. That subject to the limitations of Sections 7 and 8 of this Statute, the powers and duties of the Council shall be:

- (1) To make rules and regulations for governing its own proceedings, including the determining of the quorum necessary for the transaction of the business of the Council and of the various committees and sub-committees.
- (2) Subject to the provisions of the University Act, and to the approval of the Board of Governors, to make rules and regulations for the government, direction and management of the School and the affairs and business thereof.
- (3) To fix and determine the courses of graduate study subject to the approval of the Senate.
- (4) Subject to the approval of and confirmation by the Senate to appoint the examiners for and to conduct the examinations of the graduate courses and to determine the results of such examinations.
- (5) To deal with and, subject to an appeal to the Senate, to decide upon all applications and memorials by students or others in connection with the School of Graduate Studies.
- (6) To consider and report to the Senate upon such matters affecting the School of Graduate Studies as to the Council may seem meet.

6. That the general administration of the School shall be vested in its Council, from which an Executive Committee, consisting of the President, the Dean, and twenty-one members shall be elected as follows:

- (1) Five members by each of the Councils of the Faculties of Arts, of Medicine, and of Applied Science and Engineering.
- (2) Two members by each of the Councils of the Faculties of the College of Education, of Forestry and of Dentistry.

The persons so elected shall hold office for one year or until their successors are elected.

7. (a) That the five members of the Executive Committee of the School elected as in Section 6 as representatives of the Faculty of Arts shall constitute a sub-committee to administer the regulations governing the degree of Master of Arts. Similarly the five representatives of the Faculty of Medicine shall be a sub-committee to administer the regulations governing the degrees of Doctor of Medicine and Master of Surgery; the five representatives of the Faculty of Applied Science and Engineering a sub-committee to administer the regulations governing the degree of Master of Applied Science, Master of Architecture, Civil Engineer, Mining Engineer, Mechanical Engineer, Electrical Engineer, Chemical Engineer and Metallurgical Engineer; the two representatives of the College of Education a sub-committee to administer the regulations governing the degree of Doctor of Pedagogy; the two representatives of the Faculty of Forestry a sub-committee to administer the regulations governing the degree of Forest Engineer; and the two representatives of the Faculty of Dentistry a sub-committee to administer the regulations governing the degree of Master of Science in Dentistry. These powers of administration shall extend to regulations relating to graduate courses, diplomas and degrees.

(b) The regulations governing the courses, diplomas and degrees mentioned in Section 7 (a) shall be determined and may be amended by the respective Councils whose representatives are entrusted with their administration, but such regulations shall become effective only after approval by the Council of the School and by the Senate of the University.

(c) No course of graduate instruction leading to the diplomas and degrees mentioned in Section 7 (a) shall be announced by the Council of the School until such course shall have been approved by the Council of the Faculty to which the Department offering such a course belongs, and it is understood that the existing relations of the Departments to the Faculties to which they belong remain unchanged.

(d) All recommendations for the granting of any of the diplomas and degrees mentioned in Section 7 (a) must be approved by the Council of the School for transmission to the Senate.

8. (a) That each of the sub-committees mentioned in section 7 (a) as representing the Faculties of Arts, Medicine and Applied Science and Engineering shall choose annually from its members *three* persons, and each of the sub-committees representing the College of Education, the Faculty of Forestry and the Faculty of Dentistry shall choose annually *one*

person and these *twelve* persons, together with the President, the Dean and *twelve* others selected from the Council of the School by the President shall constitute a committee to administer the regulations governing the degree of Doctor of Philosophy.

(b) The regulations governing the degree of Doctor of Philosophy shall be determined and may be amended by the Council of the School of Graduate Studies, subject to the approval of the Senate of the University and all recommendations for the granting of the degree must receive the approval of the Council of the School for transmission to the Senate of the University.

(c) The Council of the School of Graduate Studies shall work in the closest co-operation with the Department or Departments concerned in the determination of the Graduate Courses leading to the degree of Doctor of Philosophy (mentioned in Section 8 (b),) and in the acceptance and examination of candidates. Should the recommendation of a Department be rejected by the Council of the School of Graduate Studies, the Department may appeal to the Senate through the Council of the Faculty to which it belongs.

9. That the Council of the School is empowered, subject to the approval of the Senate, to make such adjustments in the composition of its Executive Committee as may seem to it desirable, if and when (a) by action of the Senate other degrees shall come under the jurisdiction of the Council of the School, or (b) by action of the Board of Governors other Faculties are established, the Councils of which entrust the administration of the regulations respecting their graduate degrees to the Council of the School of Graduate Studies.

## GENERAL REGULATIONS

## ADMISSION

1. Advanced courses of instruction and facilities for research are offered to students who are graduates of any university or college of recognized standing.
2. Admission to these advanced courses, or to the privileges of research, does not in itself imply admission to candidacy for a higher degree.

## REGISTRATION

3. Application for registration in the School of Graduate Studies must be made to the Secretary not later than the 5th of October in any year, and the application must be accompanied by statements of the applicant's degrees, of the courses pursued as an undergraduate and his standing therein, and of the courses he wishes to pursue.

## DEGREES

4. The degrees which the University of Toronto offers to graduate students are Doctor of Philosophy (Ph.D.), Master of Arts (M.A.), Doctor of Medicine (M.D.), Master of Surgery (Ch.M.), Master of Applied Science (M.A.Sc.), Master of Architecture (M.Arch.), Civil Engineer (C.E.) Mining Engineer (M.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), Chemical Engineer (Chem. E.), Metallurgical Engineer (Met. E.), Doctor of Pedagogy (D.Paed.), Forest Engineer (F.E.), Master of Science in Agriculture (M.S.A.) and Master of Science in Dentistry (M.Sc.Dent.)

REGULATIONS FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

5. A candidate for the degree of Doctor of Philosophy must have been regularly registered in the School of Graduate Studies in accordance with the provisions of Section 3. Registration must be repeated at the beginning of each year of the course.

6. The candidate shall, as a registered graduate student, have pursued in this University for at least three years, under the direction of some one department, an advanced course of study, which must be approved by the committee administering the regulations governing the degree of Doctor of Philosophy. Exemption from one of the three years required may be granted by the committee, on the report of the department concerned to a candidate who has furnished satisfactory evidence of having pursued for at least one year a course of advanced study in his major subject

at another University, or who, at graduation as Bachelor of Arts in this University, has obtained first class honours in a special course, covering one year of advanced study approved by the committee.

It must be clearly understood, however, that the degree is granted only to such students as give evidence of general proficiency, power of investigation and high attainments in the special field in which the major work is done.

7. A statement of the course of study proposed must be sent to the Secretary of the School of Graduate Studies not later than the 1st of November of the first year of registration, and must be accompanied by the approval of the departments concerned.

8. The course shall include the study of a special subject, termed the major subject, and of two other subjects, termed the minor subjects. Only one minor subject shall be selected from the group of subjects of the department which includes the major subject. The time required for the two minor subjects should not exceed two-thirds of that required for the major subject.

9. The candidate must have an adequate knowledge of French and German. In special cases the substitution of another foreign language for one of these will be permitted. In some departments a knowledge of Latin is also essential.

10. The candidate shall present, either during his course of study or at the completion of it, a thesis embodying the results of an original investigation, conducted by himself, on some approved topic selected from his major subject.

11. The acceptance of the thesis shall be determined by the committee administering the regulations governing the degree of Doctor of Philosophy on the report of the department which includes the major subject. This report shall state, in terms to be approved by the Council, whether the thesis complies with the conditions prescribed by this University, and, in the judgment of the department, is worthy of publication, as defined in section 14 and whether the department recommends that the thesis be accepted in conformity with the requirements for the degree of Doctor of Philosophy.

The work upon which the thesis is based must be carried on under the direction of a member of the University staff and in the case of qualified students may, with the approval of the Council of the School of Graduate Studies, be carried on at an affiliated College of the University.

12. The candidate shall undergo examinations in his major and minor subjects conducted by the departments in which he is enrolled. The departments shall be responsible to the Council for the conduct of these examinations, and when the candidate shall have fulfilled all the requirements of the departments concerned in respect of the major and minor subjects and the thesis shall have been recommended for acceptance in accordance with regulations 10 and 11, the departments in which the candidate is registered shall so report to the Council.

13. When the departmental reports called for in regulations 11 and 12 shall have been received and the Committee administering the regulations governing the degree of Doctor of Philosophy shall have accepted the thesis, the candidate shall be required to give an exposition of his thesis and to defend it before a specially appointed committee of the Council.

All members of the Council shall have the right to be present at this examination and to take part in it. The special committee to which the conduct of this examination is assigned shall be appointed by the Dean of the School of Graduate Studies in consultation with the Head of the Department in which the candidate has taken his major subject. At least one member of the committee shall be appointed from a department other than those in which the candidate has taken his major and minor subjects. The committee, through the Dean or his representative, shall report the result of the examination to the Council.

14. Before the degree is awarded the candidate must deposit with the Secretary of the School of Graduate Studies two printed or typewritten copies of his complete thesis, and furthermore he must, subject to the approval of the committee administering the regulations governing the degree of Doctor of Philosophy, make such arrangements as will ensure the publication of the thesis either as a whole or in an abstract approved by the committee. Such abstract shall consist of not less than twelve hundred words. On its title page each printed or typewritten copy of the thesis shall have the words "A Thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy in the University of Toronto", and in the case of abstracts the words "Abstract of a Thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy in the University of Toronto."

15. On the report of the Council of the School of Graduate Studies that all the requirements have been complied with, the Senate may, either at a Convocation or at any one of its regular meetings, confer on the candidate the degree of Doctor of Philosophy.

#### REGULATIONS FOR THE DEGREE OF MASTER OF ARTS

16. A candidate for the Degree of Master of Arts must have been regularly registered as a graduate student in this University in accordance with the provisions of Section 3. Should the course of study extend over more than one year registration must be repeated at the beginning of each year.

17. If not registered as a graduate student at the beginning of the academic year, as provided in the regulations given above, the candidate shall not be eligible for the degree in the following June.

18. A statement of the course of study or the subject of the thesis proposed, must be sent to the Secretary of the School of Graduate Studies

not later than the 1st of November, and must be accompanied by the approval of the department or departments concerned.

19. Attendance during at least one session is obligatory on candidates for the Master's Degree; but dispensation from such attendance may be granted to graduates of the University of Toronto if the department or departments concerned, from direct knowledge of the candidate's attainments, recommend such dispensation on special grounds.

20. A candidate will proceed to the Degree under one or the other of the following sets of regulations according as he is a Bachelor of Arts in an Honour Course or a Bachelor of Arts in the Pass Course. If accepted as a candidate, a graduate of another University or a graduate of a faculty other than that of Arts, shall be assigned, on the basis of his qualifications, for the purpose of this clause, to one or the other of these classes.

#### I. BACHELOR OF ARTS IN AN HONOUR COURSE.

Candidates may qualify for the Degree:

(a) By the pursuit for at least one year of an approved course of study and the passing of a satisfactory examination therein. A course of study shall not be approved unless (1) it is a continuation of a course previously pursued for graduation, or (2) it has been recommended by the department concerned on account of other special qualifications possessed by the candidate. In this latter case the course will normally extend over at least two years.

(b) By presenting a thesis embodying the results of some special study or investigation and adjudged to be of sufficient merit. The thesis shall be accepted only on the approval of the department or departments concerned. The candidate shall be required to pass an examination, written or oral, or both written and oral, conducted by the department or departments concerned, on the subject of the thesis and on his general knowledge of the subject of the department or departments. This examination shall not be held earlier than six months after the date of registration, and two printed or typewritten copies of the thesis submitted must be presented to the Secretary of the School of Graduate Studies at least two weeks before the examination takes place. If the candidate is to be eligible for the degree in June the thesis must be presented not later than the 1st of May, but any earlier date may be determined by the department concerned.

The work upon which the thesis is based must be carried on under the direction of a member of the University staff and in the case of qualified students may, with the approval of the Council of the School of Graduate Studies, be carried on at an affiliated College of the University.

#### II. BACHELOR OF ARTS IN THE PASS COURSE.

Candidates may qualify for the Degree:

(a) By the pursuit for at least two years, under the direction of one department, of an approved course of study and the passing of a satis-



factory examination therein. No course of study shall be approved unless it is based on courses which have been taken for at least three years in the undergraduate course.

(b) Under exceptional circumstances only, a Bachelor of Arts in the Pass Course may be permitted to proceed to the degree of Master of Arts by thesis, in accordance with the regulations in clause 20, I (b). Candidates must be of at least two years standing as Bachelors of Arts.

Graduates in Arts of this University, who have fulfilled all the requirements for the degree of Doctor of Philosophy may, on payment of the fee for the degree of Master of Arts, be admitted to that degree without further examination. Graduates in Arts of another University, or graduates in other Faculties of this or another University, who have fulfilled all the requirements for the degree of Doctor of Philosophy may, on special recommendation to that effect by the departments concerned, also be admitted to the Master's Degree without further examination, on payment of the fee for that degree.

#### REGULATIONS FOR THE DEGREE OF DOCTOR OF MEDICINE

An advanced degree in Medicine is offered to Graduate Students, *viz.*, Doctor of Medicine (M.D.)

(1) A graduate in Medicine of at least two years' standing who has obtained the degree of Bachelor of Medicine of the University of Toronto and has spent at least one year as an interne on the wards of a teaching hospital and at least one year in laboratory work which, in the opinion of the Faculty of Medicine of the University, has a direct bearing on Medicine, or at least two years in hospital or laboratory work as above defined, or at least three years in the general practice of Medicine, may present himself for the degree of Doctor of Medicine.

Graduates other than those of the University of Toronto who have obtained the degree of Bachelor of Medicine or Doctor of Medicine from a recognized University may present themselves for the degree of Doctor of Medicine of the University of Toronto under the conditions of this paragraph.

(2) Each candidate for the degree of Doctor of Medicine shall be required to pass an examination in Clinical Medicine, in which he shall be required to report upon at least two medical cases assigned to him. If the candidate intends or is practising a Specialty in Medicine, one of the cases selected for the examination shall belong to the Specialty mentioned in the application of the candidate for the degree of Doctor of Medicine. The candidate must show proficiency in the application of all general methods, bedside and laboratory, in common use in the clinical investigation of patients, as well as an acquaintance with the use, value and application of special methods.

(3) Each candidate for the degree of Doctor of Medicine shall submit an acceptable thesis on a subject pertaining to the science or practice of Medicine, and this thesis must include a review of the history and literature of the subject selected.

(4) A candidate may offer as his thesis the result of work done and published prior to the date of application for the degree of Doctor of Medicine, provided it fulfils the above conditions.

(5) The School of Graduate Studies at its discretion may exempt a candidate from the whole or part of the examination in Clinical Medicine if the thesis presented by the candidate is of exceptional merit.

#### REGULATIONS FOR THE DEGREE OF MASTER OF SURGERY

An advanced degree in Surgery is offered to Graduate Students, *vis*; Master of Surgery (Ch.M.).

Before a candidate will be eligible to register for this degree he must have fulfilled the following entrance requirements:

(1) Graduated in Medicine from a recognized University.

(2) Spent one year in a recognized Hospital as an Interne on a rotating service or its equivalent. (Two years general practice may be accepted as the equivalent of this).

It is recommended that a statement of the course of study proposed, accompanied by the approval of the departments concerned, be sent to the Secretary of the School of Graduate Studies at the time of the candidate's registration.

#### LENGTH OF COURSE:

The course will be nominally of two years' duration of twelve months each.

The course will consist of:

#### *First Year (Clinical)*

One year's training in Surgery in a hospital approved by the School of Graduate Studies. This may be taken while the student is acting as a Hospital Interne or Resident in Surgery.

At the end of the First Year the candidate must present a certificate to the School of Graduate Studies from the Surgeon in charge of the service in which the candidate has worked, stating the nature and details of the work done, and the degree of efficiency with which it has been carried out.

Providing the credentials of work done are satisfactory to the School of Graduate Studies, the candidate may proceed with the examination.

The candidate will be required to pass a written and oral examination in Anatomy and Physiology.

A candidate failing in the examination may apply for a supplemental examination in the subject or subjects in which he has failed.

*Second Year (Clinical)*

One year's training in Surgery in a Hospital approved by the School of Graduate Studies. This may be taken while the candidate is acting as a Hospital Interne or Resident in Surgery.

At the end of the second year the candidate must present a certificate to the School of Graduate Studies from the Surgeon in charge of the service on which he has worked, stating the nature and details of the work done and the degree of efficiency with which it has been carried out.

One of the clinical years may be spent in the Department of Obstetrics and Gynaecology.

One year of the course must be taken in the University of Toronto in all cases.

Candidates, besides being familiar with the general field of Surgery, must be able to make:

- (a) A satisfactory examination of the Eye, Ear, Nose & Throat.
- (b) A satisfactory pelvic examination.
- (c) A satisfactory routine laboratory examination.

Candidates must present a satisfactory thesis and pass a written and oral examination in General Surgery, including Surgical Anatomy and Pathology.

Before proceeding to the final examination, credentials of work done during the second hospital year, which are satisfactory to the School of Graduate Studies, must be presented.

Upon application to the School of Graduate Studies a candidate who has fulfilled all other requirements may present himself for examination in all subjects at the end of his second year.

REGULATIONS FOR DEGREES OF  
MASTER OF APPLIED SCIENCE, MASTER OF ARCHITECTURE,  
CIVIL ENGINEER, MINING ENGINEER, MECHANICAL  
ENGINEER, ELECTRICAL ENGINEER, CHEMICAL ENGINEER,  
METALLURGICAL ENGINEER

A. The regulations governing the Degrees of Master of Applied Science and Master of Architecture for the session 1927-28 shall be determined as follows:

1a. A candidate for the degree of Master of Applied Science shall hold the degree of Bachelor of Applied Science of this University or a degree from some other University recognized as equivalent by the Council of the School of Graduate Studies.

1b. A candidate for the degree of Master of Architecture shall hold the degree of Bachelor of Architecture or the degree of Bachelor of Applied

Science in Architecture of this University or a degree from some other University recognized as equivalent by the Council of the School of Graduate Studies.

2. He shall register with the Secretary of the School of Graduate Studies at the beginning of the academic year.

3. Not later than November 1, 1927, he shall submit to the Secretary for acceptance by the Council of the School of Graduate Studies the title of his proposed thesis as approved by the department concerned.

4. Not later than April 30, 1928, he shall present evidence to the Council of the School of Graduate Studies that he has spent not less than one academic year of the department concerned as a student enrolled in one of the following departments on a course of study approved by the department: Civil Engineering, Mining Engineering, Mechanical Engineering, Architecture, Chemical Engineering, Electrical Engineering, Metallurgical Engineering.

5. Not later than April 30, 1928, evidence that the candidate has satisfactorily met all the requirements of the department with regard to thesis and to such examinations as the department shall require, shall be forwarded to the Council of the School of Graduate Studies through the sub-committee administering the regulations governing the degrees of Master of Applied Science and Master of Architecture.

B. The regulations governing the Professional Degrees of Civil Engineer (C.E.), Mining Engineer (M.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), Chemical Engineer (Chem.E.), Metallurgical Engineer (Met.E.), for the Session 1927-28 shall be determined as follows:

1. A candidate for one of the said degrees shall hold the diploma of the School of Practical Science or of the Faculty of Applied Science and Engineering or the degree of Bachelor of Applied Science.

2. He shall have spent at least three years after receiving the diploma or the degree in the actual practice of the branch of engineering wherein he is a candidate for a degree.

3. Intervals of non-employment, or of employment in other branches of engineering, shall not be included in the above three years. It shall not be necessary that the several periods requisite to make up the said three years be consecutive.

4. Notice in writing shall be sent to the Secretary not later than the first day of November, informing him of the degree to which the candidate wishes to proceed and of the title of his proposed thesis for the approval of the Examiners.

5. Satisfactory evidence shall be submitted to the University Examiners as to the nature and length of the candidate's professional experience for the purpose of clauses 2 and 3, *i.e.*, a complete and detailed history of his professional activities from the date of graduation up to the time of applic-

ation, stressing particularly that part of his experience that gave rise to his desire to prepare a thesis on the subject submitted for the approval of the University Examiners; together with certificate or certificates from former employers substantiating the statements as to the nature and duration of service enumerated.

The examiners may satisfy themselves by oral or written examinations in regard to the candidate's experience and competence.

6. The candidate shall prepare an original thesis on some engineering subject in the branch in which he wishes a degree, the said thesis to be accompanied by all necessary descriptions, details, drawings, bills of quantities, specifications and estimates.

The candidate may be required at the option of the examiners to undergo an examination in the subject of this thesis.

7. The thesis, with accompanying papers, described in clause 6 shall be sent to the Secretary not later than the first day of March.

8. The candidate shall be required to present himself for examination in the months of March or April or at such time as may be arranged by the Examiners.

9. The thesis, drawings, and other papers submitted under clause 7 shall become the property of the University.

10. Nothing in this statute shall prevent any candidate from receiving more than one of the said degrees, provided he has the necessary qualifications for each degree. An interval of three years must elapse between the granting of any two degrees under this statute.

#### REGULATIONS FOR THE DEGREE OF DOCTOR OF PEDAGOGY

The degree of Doctor of Pedagogy (D.Paed.) will be awarded under the following conditions:

1. The candidate shall hold an approved degree in Arts or Science or in the applied sciences of Agriculture, Engineering, or Commerce.

2. The candidate shall be in attendance at the Ontario College of Education during three regular College Sessions or four Summer Sessions. A High School Assistant's, First Class, or Second Class certificate valid in Ontario, or a regular Course in an approved training school for teachers will be accepted in lieu of the attendance during one of these regular Sessions or one of the Summer Sessions.

3. The Course shall consist of the four subjects and a thesis as defined in Sections 4 and 5. The subjects may be taken in any order, provided that not more than two be taken in any regular Session and not more than one in any Summer Session. Candidates who, under Section 2, are exempted from attendance during one regular Session or one Summer Session will be exempted also from the instruction and examination in one of the four subjects.

4. The examinations shall be held in May at the University of Toronto or in any other locality in the Province chosen by the candidate and approved by the Senate and under a presiding examiner appointed by the Senate, provided the candidate thereat defray the cost of the local examinations. The candidate shall send notice not later than the 15th day of March of his intention to take the examinations and of the locality he has chosen for such examination.

5. The candidate, after passing the prescribed examinations, shall also submit on or before March 1st a thesis on some educational topic selected with the approval of the Ontario College of Education. In valuing this thesis literary excellence, as well as the discussion of the subject, will be taken into account. After the examiners have reported in favour of the candidate's examinations and thesis, and before the degree of D.Paed. is conferred, the candidate shall furnish the Secretary of the School of Graduate Studies with four copies of the thesis and shall make arrangements to publish the thesis or an approved abstract thereof.

6. *Subjects of Instruction and Examination.*

(a) The Science of Education, including a study of the philosophical, ethical, and sociological bases of education. (Two papers.)

(b) Educational Psychology. (Two papers.)

(c) The History of Education in Western Europe and North America in modern times, with special reference to Ontario, Great Britain, and the United States. (Two papers.)

(d) Educational Administration in Great Britain, the United States, France, and Germany, with special reference to the administration and organization of education in Ontario. (Two papers.)

#### REGULATIONS FOR THE DEGREE OF FOREST ENGINEER

The degree of Forest Engineer (F.E.) is granted to the graduates holding the degree of B.Sc.F., who, after three years' employment in forestry work, present an acceptable thesis, the details to be arranged and the subject to be previously approved by the Faculty.

#### REGULATIONS FOR THE DEGREE OF MASTER OF SCIENCE IN AGRICULTURE

1. Candidates eligible for the degree must have received the degree of Bachelor of the Science of Agriculture from the University of Toronto or must possess equivalent qualifications.

2. Application for registration as a candidate for the degree must be made to the Secretary of the School of Graduate Studies not later than the 5th of October in any year, and the application must be accompanied by statements of the applicant's degrees, of the courses pursued as an under-

graduate and his standing therein and of the course or courses of study he wishes to pursue.

3. A candidate will be required to spend not less than one academic year in study and research and must submit a thesis which shall be an original contribution to scientific knowledge. He must possess a reading knowledge of at least one foreign language and he must satisfactorily undergo an examination in the subject in which his thesis lies, together with such other examinations as may be required.

4. The supervision of the candidate's work and the conduct of the required examination shall be by a department or departments of the University of Toronto in collaboration with a department or departments of the Ontario Agricultural College.

Information regarding courses offered at the Ontario Agricultural College may be obtained from the Head of the Department concerned.

#### REGULATIONS FOR THE DEGREE OF MASTER OF SCIENCE IN DENTISTRY

A candidate eligible for registration for this degree must be a graduate of the regular undergraduate course of the Faculty of Dentistry of the University of Toronto or must possess equivalent qualifications.

The regulations governing the degree are as follows:

1. That the course leading to the degree shall include one major and one minor subject, and shall require at least two years of post-graduate study in some primary or clinical laboratory of the University of Toronto. In addition, each candidate shall be required to submit a thesis embodying the results of his studies and to give evidence that he has a reading knowledge of either French or German.

2. That a graduate in Dentistry who has been granted the degree of Bachelor of Science in Dentistry, or its equivalent, may be granted credit for one year of post-graduate study toward the degree of Master of Science in Dentistry.

3. That in each case the subjects selected for the thesis and for the major and minor studies must be approved by the sub-committee of the Graduate School which administers the regulations governing the degree, and each candidate, before being granted the degree, must pass examinations upon his thesis, and upon both his major and minor subjects, such examinations to be conducted by the staffs of the departments concerned.

## FEES

## Doctor of Philosophy:—

Registration and tuition.....	first year	\$25.00
Registration and tuition.....	(second and third years, each year) . . . . .	45.00
Examination.....		25.00
Degree.....		25.00

If the course is extended over more than three years a registration fee of \$5.00 for each additional year is required.

## Master of Arts:—

Registration and tuition.....	first year	\$25.00
Each subsequent year.....		5.00
Examination.....		10.00
Degree.....		10.00

Candidates for the degree of Master of Arts shall pay \$25.00 for registration and tuition for one year of the course. If the course is extended over more than one year a registration fee of \$5.00 must be paid for each additional year.

## Graduate Students not proceeding to a degree—

	For the Session	For the Term
For a course in any one subject, including registration. . .	\$10.00	\$5.00
For a course in more than one subject, each subject including registration.....	9.00	5.00
Maximum Fee.....	45.00	23.00

If any or all of the courses taken by a Graduate student are, on the recommendation of the department or departments concerned, later accepted by the Council of the School of Graduate Studies as part of the student's course of instruction for the degree of Master of Arts or Doctor of Philosophy, an additional fee shall be charged, if necessary, to bring the total fees paid for registration and tuition up to the amount paid by a candidate registered for the degree of Master of Arts or Doctor of Philosophy.

The fee for registration shall be paid by the candidate immediately upon being notified of admission to the course.

If the candidate is required to repeat either examination an additional fee of \$10.00 will be charged.



## Doctor of Medicine and

## Master of Surgery:—

Instructional fee for all students enrolled for these Degrees who are not holding University or Hospital appointments in this University.....per annum	\$150.00
Registration fee for all students enrolled for these Degrees who are holding University or Hospital appoint- ments in this University.....per annum	5 00
Examination.....	10.00
Degree.....	10.00

## Master of Applied Science:—

Examination and Degree.....	\$25.00
-----------------------------	---------

## Master of Architecture:—

Examination and Degree.....	\$25.00
-----------------------------	---------

## Professional Degrees:—

Civil Engineer

Mining Engineer

Mechanical Engineer

Electrical Engineer

Chemical Engineer

Metallurgical Engineer

Examination and Degree.....	\$20.00
-----------------------------	---------

## Doctor of Pedagogy:—

Registration.....	\$5.00
Tuition, examination, library.....	10.00
Summer Session.....	10.00
Examination.....each subject	3.00
Degree.....	25.00

## Forest Engineer:—

Examination and Degree.....	\$20.00
-----------------------------	---------

## \*Master of Science in Agriculture:—

Registration and tuition.....first year	\$25.00
Each subsequent year.....	5.00
Examination.....	10.00
Degree.....	10.00

## \*Master of Science in Dentistry:—

Registration and tuition.....first year	\$25.00
Each subsequent year.....	5.00
Examination.....	10.00
Degree.....	10.00

## Graduate Students' Union:

Annual Fee.....	\$1.00
-----------------	--------

\*Subject to revision for 1928-1929.

## FELLOWSHIPS

The University offers annually to qualified students intending to pursue advanced graduate study a number of fellowships, each amounting to \$500, the holders of which will, for the year of their tenure, be entitled to free tuition. Some are confined to special Departments, but those specified in paragraph (1.) below are open to students in all Departments, who are proceeding to the degrees of M.A. and Ph.D. Others are called Tutorial Fellowships because the holders of them are required to give a certain amount of instruction in the class-room or laboratory in elementary subjects, but the time so devoted is small and, accordingly, the holders are given opportunity to pursue their special advanced courses of study.

These Fellowships are as follows:

1. SPECIAL OPEN FELLOWSHIPS.

By the generosity of the Canadian Pacific Railway, the Imperial Oil Company, The Robert Simpson Company, Colonel R. W. Leonard and Sir Edward Kemp, there are seven Fellowships available to students who undertake to pursue graduate work in any of the courses offered by the Departments of this University for the degrees of M.A. and Ph.D. under the authority of the School of Graduate Studies. The value of each Fellowship is \$500 for one year with free tuition. If the holder of a Fellowship gives satisfactory evidence of progress in his work during the year he may receive the renewal of it for a second year. Preference will be given to candidates who are graduates of the Universities of Canada outside Ontario. Applications, together with details of undergraduate courses taken and certificates therefor, should be addressed to the Dean of the School of Graduate Studies not later than the 1st of May.

2. THE UNIVERSITY OF TORONTO WAR MEMORIAL FELLOWSHIP.

The War Memorial Fellowship, established by the Alumni Federation of the University of Toronto, is open to graduates (men or women) of approved Canadian universities enrolled in, or intending to enroll in, the School of Graduate Studies for the purpose of proceeding to a degree in any department of this University. The value of this fellowship is \$500, for one year with free tuition. Application form, accompanied by official statement of undergraduate standing, must be sent to the Secretary-Treasurer of the Alumni Federation, University of Toronto, before May 15th.

3. SPECIAL DEPARTMENTAL FELLOWSHIPS.

(a) Alexander Mackenzie Research Fellowships, two in number, of \$500 each, for research in the Departments of Political Science and History, awarded to graduates of any university. Applications for these Fellowships should be addressed to the Dean of the School of Graduate Studies not later than the 1st of May.

(b) James H. Richardson Fellowship, of \$500, awarded in Anatomy by

the Senate on the recommendation of the Professors of Anatomy, Biology and Surgery. Applications for this Fellowship should be addressed to the Professor of Anatomy.

(c) The George Brown Memorial Fellowship in Medical Science, of \$1,500, awarded every three years at the Convocation for conferring degrees in Medicine, to the Bachelor of Medicine of not more than three years' standing who has taken a high place in the professional examinations of the last four years of his course and in Biology of the first year and is judged to be capable of carrying on research. The holder of the Fellowship is required to devote not less than one year to original research in a department of the University of Toronto or of any other approved Medical School or Hospital.

(d) The Ellen Mickle Fellowship, being the annual income from an endowment of twenty-five thousand dollars (\$25,000) has been established by the late Dr. W. J. Mickle, to be given to the student (or students) who in the examinations at the end of the fourth year of the Old Course or the fifth year of the New Course in Medicine, shall have taken honours of the first class in at least three-fourths of the subjects of that year, and shall have obtained the highest marks in the examinations. The award will be made to the above referred to student (or students) provided he proceed to the degree of Bachelor of Medicine in this University and spend one year in post graduate study approved by the Council of the Faculty of Medicine.

#### 4. THE ALEXANDER MCPHEDRAN RESEARCH FELLOWSHIP IN CLINICAL MEDICINE.

This Fellowship is open to graduates in Medicine of the University of Toronto and of such other Universities and Medical Schools as may be approved of by the Faculty of Medicine. It is tenable for one year but the holder of it is eligible for reappointment. The Fellowship is awarded on the recommendation of the Professor of Medicine to the President, and the holder of it is obliged, during its tenure, to devote his whole time to investigations in Clinical Medicine under the direction of the Professor of Medicine. Applications for nominations to the Fellowship should be forwarded to the Professor of Medicine not later than the first day of May of each year.

#### 5. THE NIPISSING MINING COMPANY RESEARCH FELLOWSHIP.

The Nipissing Mining Company has endowed a Research Fellowship in the Department of Mining Engineering to be known as The Nipissing Mining Company Research Fellowship, of the annual value of eleven hundred dollars (\$1100). This fellowship is open to graduates of any University. Applications for this Fellowship should be addressed to the Secretary of the School of Graduate Studies not later than September 1st of each year.

#### 6. EDUCATION FELLOWSHIPS.

Four fellowships of not less than \$500 each are offered annually to teachers who undertake to pursue graduate work in Education leading to the degree of D.Paed. or Ph.D. On the recommendation of the instructors concerned these fellowships may be renewed for a second year. Applications for these fellowships should be addressed to the Dean of the Ontario College of Education not later than June 1st of each year.

#### 7. ONTARIO GOVERNMENT FELLOWSHIPS.

The Department of Agriculture of the Province of Ontario has granted \$2,000 for scientific research in agriculture. The holders of the fellowships and the subjects of research are to be chosen by a joint committee of the University and the Agricultural College, known as the committee on Graduate studies in Agriculture. The names of the candidates and the subjects chosen are to be submitted for approval to the Minister of Agriculture and to the School of Graduate Studies. The holders of the fellowships must register in the School of Graduate Studies for an advanced degree.

#### 8. TUTORIAL FELLOWSHIPS.

There are eight of these Fellowships, the holders of which are required to give part of their time to elementary instruction in the class-room or laboratory, and are also to engage in advanced study and research.

These Fellowships are annually awarded in the following Departments: three in Mathematics, three in Physiology and Biochemistry, four in Pathology, and two in Botany.

These Fellowships are open to graduates of any University and the appointments to them are made, on the recommendation of the staffs in the respective Departments, by the Board of Governors.

#### DEMONSTRATORSHIPS, ASSISTANT DEMONSTRATORSHIPS, AND ASSISTANTSHIPS

Certain of the Departments of Science offer annually to qualified graduates of any University positions as Demonstrators, Assistant Demonstrators, or Assistants, which involve instruction to elementary laboratory classes, but only a certain number of hours per week in each case is required, and the instructors are accordingly free to pursue advanced study and research with the object of qualifying for the degrees of M.A. and Ph.D.

The number of these posts varies from year to year, but for the session 1926-1927 they were, according to Departments, as follows:

Physics, 13 Assistant Demonstratorships; Chemistry, 14 Assistantships; Botany, 8 Assistantships; Pathological Chemistry, 3 Assistantships; Biochemistry, 1 Demonstrator, 3 Fellows; Physiology, 1 Demonstrator, 4 Fellows.

Applications for these positions should be addressed to the Head of the Department in each case. The honorarium is \$500 or more.

### GRADUATE STUDENTS' UNION

All students registered in the School of Graduate Studies are thereby members of the Graduate Students' Union, and all resident students must pay the annual fee of \$1.00 for the support of the activities of the Union.

### HART HOUSE

Male students registered in the School of Graduate Studies may be admitted to Graduate membership in Hart House on payment of the fee of \$10.00 which entitles them to all the privileges of Graduate members, or, if they so prefer, to undergraduate membership in Hart House on payment of the fee of \$8.00, which will entitle them to all the privileges of undergraduate membership.

**ANNOUNCEMENT OF COURSES OF GRADUATE  
STUDY OFFERED BY THE DEPARTMENTS OF  
THE FACULTY OF ARTS**

In the following announcement of courses certain Minors are suggested as suitable to accompany each of the major subjects. In many cases students are advised to take the Minors indicated, but it is always to be understood that other Minors may be arranged by consultation between the student and the staffs involved.

## CLASSICS

The departments included under the Classics are four in number: Greek, Latin, Greek and Roman History, Comparative Philology and Sanskrit.

## DEGREE OF MASTER OF ARTS

Before being accepted as a candidate for the degree of Master of Arts an applicant must have done the equivalent of the Third Year Honour work in both Greek and Latin, and the equivalent of the Fourth Year Honour work in either Greek or Latin.

After the above requirements have been met, a candidate may be registered for M.A. work in the language in which the Fourth Year work has been done.

Students who, under the direction of the Classical staff, are taking courses to enable them to meet the above requirements may be registered as graduate students not proceeding to a degree.

## DEGREE OF DOCTOR OF PHILOSOPHY

A graduate student, proceeding to the degree of Doctor of Philosophy, may select any one of the following divisions as his Major:

- Greek Literature.
- Latin Literature.
- Greek and Roman History.
- Greek and Roman Philosophy.
- Comparative Philology and Sanskrit.

All candidates for the degree of Doctor of Philosophy whose major subject lies within the Classics shall give evidence of proficiency in Greek and Latin Prose Composition, or (with the consent of the staff in Classics) in one or other of them, and to this end shall take such courses as the staff may prescribe.

A graduate student will be required, before entering upon more advanced courses, to have taken such of the courses marked below by an asterisk as the staff in Classics may recommend, having regard to the range of work already completed and to the nature of the course of study he expects subsequently to pursue.

No absolute rule is laid down as to the selection of the Minors to be chosen by a candidate whose Major is in one of the classical departments, but one of them at least should be chosen from the remaining subjects in these departments, and the other, if chosen from some different department should have a definite relation to the candidate's major subject. Where both minor subjects are chosen from the departments included under the Classics, one half of the courses constituting the two minor subjects should consist of courses not marked by an asterisk.



## COURSES OF INSTRUCTION

## I. GREEK.

- \*1—Greek Prose Composition.
- \*2—Plato, Republic, Bks. I-IV.
- \*3—Plato, Republic, Bks. V-X.
- \*4—Greek Drama (Aeschylus, Agamemnon; Sophocles, Electra, Oedipus Rex; Euripides, Iphigenia in Tauris; Aristophanes, Birds, Clouds.)
- \*5—Aristotle, Ethics, Bks. I-IV, X (6-9).
- \*6—Aristotle, Poetics.
- \*7—History of Greek Philosophy (Introductory Course).
  - 8—Plato, Phaedrus, Phaedo, Gorgias. Professor Hutton.
  - 9—Plato, Laws. Professor Hutton.
- 10—Greek Tragedy. Professor Owen 1927-28.
  - (a) The Early Plays of Aeschylus.
  - (b) The Oresteia.
  - (c) The Choephoroi and the two Electras.
- 11—Greek Comedy. Professor Adams 1927-28.
- 12—Aristotle, Ethics, Bks. V, VI, VII. Professor Brett 1927-28.
- 13—The Educational Theories of Plato. Professor Robertson 1927-28.
- 14—The Political and Ethical Thought of Plato.
  - Professor Robertson 1928-29.
- 15—Pindar. Professor Norwood.
- 16—Greek Lyric Metres. Professor Norwood.
- 17—Greek Drama. Professor Norwood.
- 18—History of Greek Philosophy from Plato to Plotinus.
  - Professor Brett 1927-28.
- 19—The Relation between the Metaphysics of St. Augustine and Plato.
  - Professor Carr.
- 20—Graeco-Roman Literary Criticism with special study of Longinus.
  - Professor Dale.
- 21—The Greek Conception of the Function of Art in the State.
  - Professor Milner.
- 22—Greek Archaeology. Professor Kirkwood 1927-28.
- 23—Greek Numismatics. Dr. Harcum 1927-28.

[See also Greek and Roman History, 1, 2, 4, 9, 10].

## II. LATIN.

- \*1—Latin Prose Composition.
- \*2—Juvenal and Martial (selections).
- \*3—Virgil, Georgics I, IV, Aeneid.
- \*4—Horace.
  - 5—The Minor Poems of Virgil. Professor DeWitt 1927-28.
- 6—Roman Stoicism, with special study of Cicero, De Finibus, Bks. III,
  - Professor Robertson 1927-28.

IV.

- 7—Cicero, *Academica*, and the Eclectic Philosophy. Professor Robertson 1928-29.  
 8—Roman Archaeology. Professor Kirkwood 1927-28.  
 9—Latin Epigraphy. Professor DeWitt 1927-28.  
 10—Roman Religion. Professor DeWitt 1928-29.  
 11—Propertius. Professor Norwood.  
 12—Apuleius, *Metamorphoses*. Professor Norwood.  
 13—Boethius, *De Consolatione Philosophiae*. Professor Norwood.  
 14—Seneca. Professor Duff 1927-28.  
 [See also Greek and Roman History, 5, 6, 11, and Greek 18].

### III. GREEK AND ROMAN HISTORY

- \*1—Thucydides, Bks. I-III, VI, VII.  
 \*2—Herodotus, Bks. VII, VIII, IX.  
 \*3—Greek History, B.C. 454 to B.C. 399.  
 \*4—Aristotle, *Politics*, Bks. I, II, III.  
 \*5—Tacitus, *Annals*, Bks. I-VI, and the Principate.  
 \*6—Cicero, *Letters* (Watson); Sallust, *Catiline*; Caesar, *Civil War*.  
 \*7—Roman History (to death of Cicero).  
 \*8—Roman Institutions.  
 9—Herodotus. Professor Sissons 1927-28.  
 10—Aristotle, *Politics*. Professor Milner.  
 11—The Letters of Cicero. Professor Milner.  
 12—The Geography of the Mediterranean World. Professor Cochrane 1927-28.  
 13—The Second Punic War with a special study of Livy's Third Decade. Professor Kirkwood 1927-28.  
 14—Interpretation of Greek and Roman History to 476 A.D. Professor Milner.  
 15—Polybius and the Second Century B.C.  
 16—(a) The Greek Historians. Professor Cochrane 1927-28.  
       (b) Latin Historical Literature. Professor Cochrane 1927-28.  
 17—The Roman Occupation of Britain. Professor Smith 1927-28.  
 18—Greece and Persia to the Christian Era. Professor Duckworth 1928-29.  
 19—Greece and Egypt to the Second Century B.C. Professor Duckworth 1927-28.  
 20—Rome and Egypt. Professor Duckworth 1927-28.  
 21—Rome and the Jews. Professor Duckworth 1928-29.

### IV. COMPARATIVE PHILOLOGY AND SANSKRIT.

- \*1—Comparative Philology.  
 2—Introduction to the study of Sanskrit. Professor Hamilton.  
 3—Introduction to Oscan and Umbrian. Professor DeWitt 1927-28.

The following are the minor subjects offered in the Classics\*:

A—Greek Literature: Greek, 2, 4, 6.

B—Latin Literature: Latin, 2, 3, 4.

C—Greek History: Greek and Roman History, 1, 2, 3, 4.

D—Roman History: Greek and Roman History, 5, 6, 7, 8.

E—Greek Philosophy: Greek, 2, 3, 5, 7.

F—Comparative Philology and Sanskrit, 1, 2, 3.

G—Greek and Roman Archaeology: Greek, 22; Latin, 8, 9, 10.

## SEMITIC LANGUAGES

### DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations.

### DEGREE OF DOCTOR OF PHILOSOPHY

A candidate proceeding to the degree of Doctor of Philosophy in the department of Semitic Languages must give proof of his fitness for advanced study in this department either as being an honour graduate of the University of Toronto or as possessing an equivalent standing in some field of Semitic Philology in a recognized University or College.

A course of study must be elected by the candidate in consultation with the members of the department under whom it is proposed to pursue the major and minor subjects and must be submitted to and approved by the department.

The department will not recommend a student for the degree merely on the ground of faithful study for a definite period but only because of high attainment in such study manifested in the examinations and by the thesis.

The following divisions are offered as Majors:

Hebrew Language and Literature.

Aramaic Language and Literature.

Syriac Language and Literature.

Assyrian and Babylonian Language and Literature.

Arabic Language and Literature.

The following Minors are recommended for candidates taking a Major in this department:

Language cognate to the major subject.

Greek (Classical).

Philosophy.

Hellenistic Greek (Biblical and Patristic).

These Minors shall be chosen in accordance with the general regulations. These recommendations do not prohibit other Minors

---

\*For the courses constituting these minor subjects, equivalent courses may be substituted with the approval of the staff in Classics.

being arranged between the candidate and the department. When a minor subject is elected outside of the department, the candidate must obtain the consent of the department concerned to the choice of such Minor and he shall be subject to the regulations of that department in respect thereto. No student of this department shall be exempt from the written examination on more than one Minor.

#### COURSES OF INSTRUCTION

##### *Aramaic:*

- 1.\*Introductory Palestinian Aramaic. Translations from Daniel, Ezra and Targums. Professor Potter.
2. The development of the Aramaic dialects.

##### *Arabic:*

1. Elementary course. Translations from simple texts.
- 2.\*Reading of representative selections from Arabic Literature. Professor McLaughlin.

##### *Assyrian, Babylonian and Sumerian:*

- 1.\*Elementary Assyrian. Professor Irwin.
2. Advanced Assyrian.
- 3.\*Bilingual Texts and Sumerian Inscriptions. Professor Meek.

##### *Egyptian:*

- \*Elements of Egyptian; Egyptian grammar and syntax; reading of easy hieroglyphic texts. Professor Mercer.

##### *Hebrew:*

1. Prophetical Literature of the Old Testament.
- 2.\*Poetical Literature of the Old Testament. Professor Meek.
- 3.\*Hebrew Wisdom Literature. Professor McLaughlin.
4. Hebrew Prophecy and Apocalypse.
- 5.\*Post Biblical Hebrew: Readings in Mishnah and Gemara. Professor McLaughlin.
- 6.\*Hexateuchal Criticism. Professor Mercer.
- 7.\*Critical study of selections from Prophetic Literature. Professor Taylor.
- 8.\*Religious Leadership and Authority in Ancient Israel. Professor Irwin.
- 9.\*The History of Hebrew Prophecy. Professor Irwin.
- 10.\*The Principles of Textual Criticism. Professor Meek.

##### *Syriac:*

- 1.\*Introductory Syriac. Professor Taylor.
- 2.\*Advanced Syriac. Professor Taylor.

*Hellenistic Greek:*

- 1.\*The Literature of the Septuagint. Professor Taylor.
- 2.\*Selections from Hellenistic Literature relative to the study of Religion. Professor Taylor.

*Semitic History and Archaeology:*

1. Semitic Epigraphy.
- 2.\*Semitic Archaeology and Art. Professor Mercer.
3. History of the Hebrews.
4. History of the Near East.
5. History of Mohammedanism.

*Philology:*

- \*Comparative Grammar of the Semitic Languages. Professor Meek.

\*These courses are offered in the session 1927-28. Other courses may be arranged by consultation with the department.

## ENGLISH

## DEGREE OF MASTER OF ARTS

Students admitted as candidates for this degree must have completed the courses required of honour students in the graduating department of English and History, or give evidence of possessing similar qualifications. They are required to be in actual attendance, to cover satisfactorily the work of three of the courses outlined below, and to submit a dissertation on some subject connected with their work.

## DEGREE OF DOCTOR OF PHILOSOPHY

Students admitted as candidates for this degree in English are required to be in actual attendance, to cover satisfactorily the work of at least ten of the courses outlined below (or their equivalents), and to submit a thesis: this thesis must, in the opinion of the department, be worthy of publication. They shall further be required to take one Minor from each of the groups (a) and (b) enumerated below.

The selection of Minors, of courses, and of subjects for the thesis must in every case be approved by the department.

## COURSES OF INSTRUCTION

The annexed schedule is intended to indicate the general character and the extent of the work required, but equivalent courses may be substituted for those contained in the list. Courses 1 to 5 are identical with the undergraduate English courses 3c, 4c, 3d, 4c, and 4d, respectively, and are open only to students who have not taken these courses. Those courses which are available for the session 1927-28 are marked by an asterisk:

- \*1—Old English: Grammar and reading of Selections.  
Professors Clawson and Robins.
- \*2—Middle English and Historical Grammar.  
Professors Clawson and Robins.
- \*3—Milton and Seventeenth Century Literature.  
Professors Auger and Wallace.

- \*4—The Development of the Drama.  
Professors Auger, Knox and Simpson.

- \*5—Nineteenth Century Thought.  
Professors Davis, Edgar, McCorkell and Simpson.

- \*6—Beowulf. Professor Robins.

- \*7—Chaucer and his School. Professor Clawson.

- 8—Shakespeare.

- 9—The Drama in the Seventeenth Century. Professor Knox.

- 10—Early Seventeenth Century Prose. Professor Davis.

- \*11—Swift. Professor Davis.

- \*12—Wordsworth. Professor Wallace.

- \*13—Browning. Professor Macdonald.

14 and 15—The study of two authors approved by the Department other than those mentioned in this list.

16 and 17—The study of two selected periods of literature other than those mentioned in this list.

- \*18—Recent English Fiction and Poetry. Professor Edgar.

- \*19—Recent English Poetry. Professor Pratt.

The following Minors are recommended for students taking their Major in this department:

Group (a)—Any one of the following courses:

- 1—Gothic as an Introduction to the Study of Philology.

Professor Robins.

- \*2—The History of Literary Criticism.

Professor Knox.

- 3—English Political Thought.

Professor Kennedy.

Group (b)—Any of the Minors offered in Classics, French, German, Italian, Spanish, History, and Philosophy.

Minors in English for candidates who are not taking their Major in English will be arranged on application.

## ROMANCE LANGUAGES

### DEGREE OF MASTER OF ARTS

The general conditions of candidacy for the Master's degree will be found on pages 12 and 13. Proposed courses of study and the subject of the thesis (if offered) must receive the approval of the staff in French, or in Italian, or in Spanish, in one of which the candidate must do the major part of his work.

A knowledge of standard classic authors is presupposed.

## DEGREE OF DOCTOR OF PHILOSOPHY

A candidate for the degree of Doctor of Philosophy shall select his major and minor subjects under the direction of the staff in Romance Languages in accordance with the general regulations. The major subject shall be chosen from one of the following groups:

Romance Philology. Italian Language and Literature.

French Language and Literature. Spanish Language and Literature.

Both Minors may be selected within the department of Romance Languages. One Minor *must* be selected within the department. If the second minor is selected outside of this department it must be chosen from a department cognate with that of the major subject. In any case the candidate must do some work in each of the four groups named above.

The department will not recommend the conferring of this degree merely because of the completion of a certain programme of studies. Evidence must be exhibited of special aptitude and of high attainment in the field chosen by the candidate. The thesis must be a distinct contribution to the literature of the subject discussed.

A student whose major subject is not in Romance Languages, but who requires a Minor in one of its groups, will be expected to make his choice of such Minor only after consultation with the staff in Romance Languages.

## COURSES OF INSTRUCTION

In the case of courses marked (a) and (b) one alone is given, unless circumstances justify both.

1—Methods of research, bibliography. One hour a week. (To be given in 1928-1929).

2—Introduction to Romance philology. Two hours a week.

Professor Ford.

3—(a) Linguistic studies in Vulgar Latin texts.

(b) French Drama from Dumas *fils* to the present.

Professor Anderson.

4—(a) Types of Old French literature from its beginnings to the fourteenth century.

(b) From Froissart to Montaigne; an introduction to French language, literature and culture of the middle period.

5—(a) Old Provençal

Professor de Beaumont.

(b) Dialectal studies based on the *Atlas linguistique de la France*.

Professor Ford.

6—(a) The Arthurian romances

(b) French phonology and morphology.

Professor Allen.

7—(a) Special studies in French literature from 1550 to 1600.

(b) The development of egotism in modern French literature.

Professor Will.

8—(a) The evolution of the French novel from the Renaissance to the Revolution.

- (b) French Comedy in the eighteenth century. Professor Green.
- 9—(a) The history of prose fiction in France
- (b) The novel of manners in the Romance countries and in England. Professor Kittredge.
- 10—(a) Studies in French literary theories and their relation to literary materials and methods.
- (b) Factors and problems in French literature under the *ancien régime*. Subterfuges and camouflage; methods of determining substance and import. Professor de Beaumont.
- 11—(a) Preclassical French drama.
- (b) Molière. Professor Jeanneret.
- 12—The Romantic drama in France. Professor Lacey.
- 13—(a) The theory of love in the *dolce stil nuovo*.
- (b) The Italian novel in the nineteenth Century. Professor Shaw.  
(13 (a) and 13 (b) to be offered in 1928-1929).
- 14—(a) Italian phonology and morphology
- (b) A subject from Italian literature of the Renaissance. Professor Goggio.
- 15—Culteranismo. Professor Buchanan.
- 16—All graduate students of the department are invited to attend the meetings of the Romance Club, on dates which will be announced to them.

### GERMANICS

The selection of courses for the degrees of Master of Arts and Doctor of Philosophy must in every case be approved by the department.

#### DEGREE OF MASTER OF ARTS

Students admitted as candidates for the degree of Master of Arts in Germanics must cover satisfactorily the work of at least three of the courses outlined below and must submit a thesis on some subject connected with the work.

#### DEGREE OF DOCTOR OF PHILOSOPHY

Students admitted as candidates for the degree of Doctor of Philosophy in Germanics must cover satisfactorily the work of at least ten courses and must submit a thesis which, in the opinion of the department, is worthy of publication. They shall further be required to select two Minors in approved departments other than Germanics.

Candidates taking their Major in a department other than Germanics may select as a Minor in German any three courses of fifty hours each.

#### COURSES OF INSTRUCTION

##### A. Linguistic Courses.

- 1—Gothic.

Mr. Surerus.



2—Old High German.	Mr. Surerus.
3—Old Saxon.	Professor Lang.
4—Icelandic.	Mr. Surerus.
5—History of the German Language.	Professor Needler.
6—Germanic Philology.	Mr. Surerus.
7—Middle High German.	Professor Needler.
8—German Phonetics and Phonology.	Professor Hedman.
9—Swedish.	Professor Hedman.
10—Dano-Norwegian.	Professor Hedman.

### B. Literary Courses.

11—Germanic Mythology and Folk-lore.	Professor Lang.
12—The Medieval Latin Lyric.	Mr. Surerus.
13—The Middle High German Popular Epic: Gudrun, The Nibelungenlied.	Professor Needler.
14—The Middle High German Court Epics.	Mr. Surerus.
15—The Middle High German Lyrics.	Professor Fairley.
16—German Literature 1300-1600.	Professor Lang.
17—History of the German Drama to Lessing.	Professor Young.
18—Lessing's Critical and Dramatic Writings.	Professor Scott.
19—Goethe's Autobiographical Prose Writings.	Professor Young.
20—Goethe's Faust.	Professor Lang.
21—Literary Relations between England and Germany in the Eighteenth Century.	Professor Needler.
22—Schiller's Philosophical Writings.	Professor Fairley.
23—The Romantic School.	Professor Fairley.
24—The German Drama in the Nineteenth Century.	Professor Lang.
25—German Literature and the French Revolution.	Professor Needler.
26—Heine.	Professor Young.
27—Schopenhauer in Relation to German Literature.	Professor Fairley.
28—German Lyrical Poetry of the Nineteenth Century.	Professor Hedman.
29—The German Short Story.	Professor Fairley.
30—The Naturalistic and Expressionistic Movements.	Professor Hedman.
31—The Dramas of Ibsen.	Professor Hedman.
32—The History of German Music with Special Reference to the Cultural Backgrounds of Germany.	Professor Holt.

Other courses may be arranged to meet the individual needs of candidates.

## HISTORY

### DEGREE OF MASTER OF ARTS

Candidates are accepted under the general regulations, but before being admitted must give evidence of adequate training for advanced study in

history. Candidates may proceed to the degree either by the pursuit of an advanced course of study or by the preparation of a thesis, in accordance with Rule 20 on pp. 13, 14 above.

Candidates for the degree by the pursuit of an advanced course of study are required to take the following subjects:

(1) Historical method, bibliography, and the development of English historical writing.

(2) Two of the following periods of history or parts thereof to be studied in detail in the leading secondary authorities and selected primary sources. The choice of periods should be made after consultation with the teaching staff in History.

(a) The History of Canada from the Discovery to 1763; *or* from 1763 to Confederation; *or* from the Act of Union to the present day.

(b) The American Revolution and the framing of the Constitution; *or* the History of the United States in the Nineteenth Century.

(c) European History: the Middle Ages *or* the Renaissance and Reformation, *or* the French Revolution and Napoleon, *or* the Nineteenth Century.

(d) British History: the Tudors, *or* the Seventeenth Century, *or* from 1688-1815, *or* the Nineteenth Century.

(e) A period of English Constitutional History.

(3) A subject within one of the following fields of study:

(a) Modern Political Theory.

(b) Economic Theory.

(c) The Economic History of England.

(d) The Organization of Modern Democratic Government.

(e) The Political Institutions of the British Empire.

Candidates for the degree by the preparation of a thesis are required to take course (1) above, and one of the options in (3). They must present a thesis on an approved subject based on the sources and prepared under the direction of the staff in history. They will in addition be examined on their knowledge of the general historical background of the subject chosen. Candidates who offer a subject in Canadian History should be prepared to avail themselves of the facilities for research in the Dominion Archives at Ottawa.

#### DEGREE OF DOCTOR OF PHILOSOPHY

Candidates are accepted under the general regulations. The choice of major and minor subjects should be made from the list given below, though other subjects may be arranged by consultation with the staff in History. All candidates are required to take a course in historical method, bibliography, and the development of English historical writing.

Candidates must present a thesis of such a character as to constitute an addition to the literature of the subject selected. Candidates who offer

a subject in Canadian History should be prepared to avail themselves of the facilities for research in the Dominion Archives at Ottawa.

- (1) The History of Canada.
- (2) The History of the United States.
- (3) The French Revolution and Napoleon.
- (4) Nineteenth Century Europe.
- (5) A period of Mediaeval History.
- (6) The Renaissance.
- (7) English Constitutional History and Law.
- (8) The History of the modern British Empire.

## POLITICAL SCIENCE

### DEGREE OF MASTER OF ARTS

Candidates for the degree of Master of Arts in the department of Political Science are admitted under the general regulations and must present evidence of having taken special undergraduate courses in Political Science or Commerce and Finance, or give such other proof of sufficient knowledge and training as will justify their acceptance as advanced students.

Candidates may proceed to the degree of Master of Arts (I) by thesis, or (II) by examination. The second method is intended for graduates who have not taken the Honour Course in Political Science or the course in Commerce and Finance at this University or equivalent courses elsewhere.

#### I. MASTER'S DEGREE BY THESIS:

(a) Candidates will select, under the supervision of the department, a field in which they wish to make investigation before undertaking a special subject for a thesis within that field.

(b) Candidates will be examined on the background of their thesis and on *either* political theory *or* economic theory.

(c) Other examinations may be required at the discretion of the department in the case of any graduate student.

The thesis must be completed and submitted on or before May 1. An oral examination on the *thesis* will be conducted by the staff of the department before the candidate is recommended to the School of Graduate Studies for the degree.

II. MASTER'S DEGREE BY EXAMINATION: This degree is offered in either of two fields (A) Economics, (B) Politics and Law. The course in each covers two years.

#### (A) Economics—First Year

Labour Problems; Money, Credit and Prices; Statistics; Public Finance and Administration; Business Administration. (4 papers.)

*Second Year*

Advanced Economic Theory; Transportation; Corporation Finance; Economic History of Canada and the United States; Commercial Law; Political Theory or Economic Geography; Business Administration. (6 papers.)

*(B) Politics and Law—First Year*

History of English Law; Roman Law; English Constitutional Law; Canadian Municipal and Administrative Law; Political Theory; Money, Credit and Prices or Public Finance and Administration. (6 papers.)

*Second Year*

Canadian Constitutional Law; Federal Constitutional Law and Institutions; Jurisprudence; International Law; Political Theory; Corporation Finance. (6 papers.)

Candidates under II will not be given dispensation from lecture courses.

Candidates must obtain at least 66% in each subject.

## DEGREE OF DOCTOR OF PHILOSOPHY

Candidates may proceed to the degree of Doctor of Philosophy in the manner prescribed in the general regulations. They may select their major course from the following list:

Economic History.

Economic Theory.

Public Finance.

Philosophy of Politics.

Constitutional History and Law.

Special subjects cognate to any or all of the above general courses are to be regarded as included under them.

Special postgraduate courses, varying in topics according to the needs of the students, are customarily given by the staff in the department. Importance is attached to individual assistance in the investigation of specific problems. The thesis offered by the candidate must present either the results of an original investigation into some problem and thus form a contribution to knowledge or a critical examination of the results of investigation by others and thus form a contribution to scholarship. One minor subject must be selected from the lists given above and the other from the subjects offered by the departments of History and Philosophy. In exceptional circumstances candidates may submit for the approval of the department some other subject of study as a second minor, even though not obviously related to the major.

An oral examination will be conducted by the staff of the department in the major and in the first minor subject before the candidate is recommended to the Council of the School of Graduate Studies for the degree.

## PHILOSOPHY

### DEGREE OF MASTER OF ARTS

Candidates for this degree will proceed under the general regulations, to be found on pages 12-14. Except in special cases, candidates will be expected to qualify by pursuing an approved course of study, and passing a satisfactory examination therein.

Candidates for this degree fall into two classes, viz., those who have, and those who have not taken Honour work in Philosophy for their B.A. degree.

Those who have taken the B.A. degree with honours in Philosophy must select their subjects of study from Courses 8-27, given below. Three courses of study will be required for the degree. In cases where permission is granted by this department, a subject taken from another department may be substituted for one in Philosophy, provided that in no case shall less than two of the required subjects be from the department of Philosophy. Subject to the approval of this department a thesis may be substituted for one of the courses.

Those students who have not graduated with honours in Philosophy, will be required, before being admitted as candidates for the degree, to take such preliminary courses, or to furnish such other proof of sufficient knowledge as will justify their admission to graduate courses. They will select their subjects of study in consultation with the staff in Philosophy. The work may be expected to require two years in most cases.

Candidates who furnish evidence satisfactory to the staff of the department of their qualifications for original investigation may with the consent of the department qualify by writing an approved thesis, and taking special work in consultation with the staff in Philosophy (20, I. (b)).

The writer of a thesis will be required to report regularly to the head of the department, and also to the head of the division in which his thesis falls.

### DEGREE OF DOCTOR OF PHILOSOPHY

Candidates for this degree must present a thesis embodying the results of independent investigation, of such a character as to make a distinct contribution to the literature of the subject and to show capacity for original research on the part of the writer. The writer of a thesis must report regularly to the head of the department, and also to the head of the division in which his thesis falls.

Students are recommended to complete the work for the degree of Master of Arts as part of the work for this degree. At least one additional subject

will be required for the minor in Philosophy of candidates who have completed the work for the Master's degree.

For the second Minor students must fulfil the requirements of the department in which such Minor is taken. Both Minors must be selected after consultation with the staff in Philosophy.

*Divisions of the department:* History of Philosophy, Logic and Epistemology, Ethics, Social Philosophy.

#### COURSES OF INSTRUCTION

The following courses are offered to graduate students. In each of these courses fifty hours will be required, including lectures and seminar work. Standing in these courses will be determined by examinations, or other tests, as the staff may determine.

##### GENERAL.

- |   |                          |                               |
|---|--------------------------|-------------------------------|
| 1—History of Philosophy.                          | Kant and modern systems. | Professor Brett.              |
| 2—History of Modern (chiefly British) Philosophy. |                          | Professor Anderson.           |
| 3—History of Ancient Philosophy.                  |                          | Professor Brett.              |
| 4—Logic, Deductive and Inductive.                 | Theory of the Judgment.  | Professor Brett.              |
| 5—Ethics, Kant and Green.                         |                          | Professors Tracy and Lane.    |
| 6—Modern Ethics.                                  |                          | Professors Tracy and Brown.   |
| 7—Social Ethics.                                  |                          | Professors Robinson and Lane. |

##### SPECIAL

- |   |                     |
|---|---------------------|
| 8—Ancient Philosophy: Thales to Plato.  | Professor Brett.    |
| 9—Ancient Philosophy: Plato to Augustine.   | Professor Brett.    |
| 10—The Metaphysics of St. Augustine in relation to Platonism.                               | Professor Carr.     |
| 11—Philosophy of Hegel.   | Professor Brown.    |
| 12—British Empiricism from Locke to Mill.   | Professor Anderson. |
| 13—Principles and Methods in Modern Philosophy: Special Subject—Realism.                    | Professor Brett.    |
| 14—Modern Philosophic Problems (Individuality, Value, the Absolute, Nature, Evil, Destiny). | Professor Lane.     |
| 15—Contemporary Realism.  | Professor Carr.     |
| 16—Continuity and Contingency, with special reference to Leibniz.                           | Professor Anderson. |
| 17—Ethical Idealism.  | Professor Tracy.    |
| 18—The Moral Self.  | Professor Tracy.    |

- 19—The Philosophy of Bergson (Ethical Aspects). Professor Lane.
  - 20—Social and Political Ethics. Professor Robinson.
  - 21—History of Social Theory. Professor Robinson.
  - 22—Social Theory. Professor Carr.
  - 23—Studies in Contemporary Ethics. Professor Phelan.
  - 24—Philosophy of Religion: Special Subject 1927-8 Modern Naturalism. Professor Brown.
  - 25—General Theory of Values. Professor Kingston.
  - 26—Philosophy of Religion: The Idea of God. Professor Kingston.
  - 27—Studies in the Psychology of Religion. Professor Lane.
- The minors offered in this department for candidates whose majors lie in other departments will consist of one or more of the courses indicated above. The exact nature and extent of the minor will be determined by the Staff after consideration of the major subject and its requirements.

## PSYCHOLOGY

### DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations. Applicants for graduate work in Psychology must satisfy the staff as to their fitness. Students who have not taken three undergraduate courses in Psychology at this or an approved University, or who have not had the equivalent of such work, may be required to complete such undergraduate prerequisites as the staff shall specify.

Candidates for the Master of Arts degree in Psychology will be required to qualify in three graduate courses and to write a thesis on a subject or problem approved by the staff. The thesis must be presented by May 1st and the candidate will thereafter be examined orally by the staff upon the field represented by the thesis.

### DEGREE OF DOCTOR OF PHILOSOPHY

Instruction leading to this degree is offered to students who qualify under the general regulations.

Candidates for the Doctor's degree in Psychology must (a) pass a preliminary examination upon the general principles of four of the fields of psychology enumerated below at least one year before presenting himself for the degree, (b) possess a reading knowledge of scientific French and German as certified to by the heads of those departments respectively, (c) present a thesis containing the results of an original investigation and showing capacity for independent research. A final examination by the staff upon the thesis and the student's knowledge of psychology will be required. For departmental purposes the following five fields are recognized: Quantitative and experimental; systematic and historical; learning and tests; genetic and comparative; social and industrial.

In compliance with the general regulations a candidate may designate his major subject and one minor from the work taken in Psychology. The second minor must be selected outside of Psychology, preferably from Anthropology, the Biological Sciences, Education, Philosophy, Physics, or, in exceptional cases a minor may be approved from other subjects of study in the University. The selection of the major and both minors must be made with the approval of the staff in Psychology.

Minors in Psychology for candidates not taking their major in this department will be arranged on application.

#### COURSES OF INSTRUCTION

Graduate students may select from the following courses of study and must have their selection approved by the department. Candidates for an advanced degree in Psychology are required to report regularly to the member of staff in charge of their major subject and to the head of the department, and are expected to take an active part in the meetings of the departmental Journal Club.

- |   |                    |
|---|--------------------|
| 1—Individual research problems as arranged by Professor Bott. |                    |
| 2—Advanced experimental psychology—Perception.                | Professor Bott.    |
| 3—Systems of Psychology critically considered.                | Professor Bott.    |
| 4—Theory, construction and use of tests.                      | Professor MacPhee. |
| 5—Learning processes.   | Professor MacPhee. |
| 6—Intelligence, character and temperament.                    | Professor MacPhee. |
| 7—Legal Psychology.   | Professor MacPhee. |
| 8—Genetic Psychology.   | Professor Blatz.   |
| 9—Comparative Psychology.                                     | Professor Blatz.   |
| 10—Research methods in Case Study.                            | Professor Blatz.   |
| 11—Advanced statistical and quantitative methods.             | Mr. Chant.         |
| 12—Industrial Psychology.                                     | Mr. Chant.         |
| 13—Historical development of Psychology.                      | Professor Brett.   |
| 14—Present tendencies in Experimental Psychology.             | Professor Phelan.  |

#### EDUCATIONAL THEORY

##### DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations.

Candidates may qualify for the degree by pursuing three approved courses of study. Of these three one must be selected from the M.A. courses specified below, one from the courses offered by another department of the University, and the third from the courses offered in this or any other department of the University. The selection of courses must be approved by the staff of this department.

Every candidate for the degree is required to present a thesis embodying the results of some special study or original investigation.



The time required to complete the requirements for the degree will normally be two years.

#### DEGREE OF DOCTOR OF PHILOSOPHY

Courses leading to the degree of Doctor of Philosophy are offered to students qualified under the general regulations. Candidates may elect to take their major subjects in any of the sections A to D below. Of the minors one may be selected in the subjects offered below; one must, and both may, be chosen from minors offered in other departments of the University. The minors are also open to candidates whose major subject lies in another department.

The thesis submitted must be a distinct contribution to knowledge and show capacity for original research.

#### COURSES OF INSTRUCTION

##### A. *Educational Administration:*

- \*1. Educational Administration in Ontario. Dean Pakenham.

##### B. *History of Education:*

2. History of Education in Great Britain during the nineteenth century. Professor Macpherson.  
3. History of Education in Ontario during the nineteenth century. Professor Macpherson.  
\*4. The Foundations of Modern Public Education. Professor Macpherson.

##### C. *Educational Psychology:*

- \*5. The Psychology of Mathematics. Professor Sandiford.  
\*6. Studies of Men and Women of Genius. Professor Sandiford.  
\*7. The Theory of Educational Measurements. Professor Sandiford.  
8. Intelligence: Its Nature and Measurement. Professor Sandiford.  
9. Achievement Tests: Their Construction and Use. Professor Sandiford.  
10. The Psychology of Individual Differences. Professor Sandiford.

##### D. *The Science and Philosophy of Education:*

- \*11. Educational Sociology. Professor Coombs.  
12. Philosophy of Education. Professor Coombs.  
\*13. Science of Education. Professor Coombs.  
\*14. Scientific Study of Educational Method. Professor Coombs.  
\*15. Social Ethics. Professor Coombs.

*Note*—Courses indicated \* are M.A. courses and minors.

## MATHEMATICS

## DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations.

## DEGREE OF DOCTOR OF PHILOSOPHY

A candidate proceeding to the degree of Doctor of Philosophy in this department may select his major subject from any of the branches of Mathematics after consultation with the staff.

The thesis submitted for the degree must give evidence of original investigation and must constitute a distinct addition to the knowledge of the subject.

## COURSES OF INSTRUCTION

- |  |                    |
|--|--------------------|
| 1—Differential Calculus. Fifty hours.  | Professor Beatty.  |
| 2—Integral Calculus. Fifty hours.  | Professor Webber.  |
| 3—Differential Equations. Fifty hours.   | Professor Fields.  |
| 4—Theory of Functions. Fifty hours.  | Professor DeLury.  |
| 5—Advanced Theory of Functions of a Complex Variable. One hundred hours.                             | Professor DeLury.  |
| 6—Theory of Algebraic Functions and Abelian Integrals (Based on Riemann, Noether, etc.) Fifty hours. | Professor Fields.  |
| 7—Theory of Algebraic Functions and Abelian Integrals (Methods of the lecturer). Fifty hours.        | Professor Fields.  |
| 8—The Algebraic Theory of Algebraic Functions of one Variable. Twenty-five hours.                    | Professor Beatty.  |
| 9—Theory of Elliptic Functions. Fifty hours.   | Professor Fields.  |
| 10—Calculus of Variations. Fifty hours.  | Professor Fields.  |
| 11—Determinants and Theory of Matrices. Fifty hours.   | Professor Fields.  |
| 12—Theory of Rational Numbers. Fifty hours.  | Professor Fields.  |
| 13—Theory of Algebraic Numbers including the Theory of the Ideals. Fifty hours.                      | Professor Fields.  |
| 14—Theory of Substitutions with applications to Algebraic Equations. Twenty-five hours.              | Professor DeLury.  |
| 15—Real Variables, Fourier's Series. Seventy-five hours.   | Professor Webber.  |
| 16—Topics in the Theory of Functions. Twenty-five hours.   | Professor Beatty.  |
| 17—Partial Differential Equations. Fifty hours.  | Professor Pounder. |
| 18—Elliptic Functions. Fifty hours.  | Mr. Stevenson.     |
| 19—Differential Equations (Existence Theorems, etc.). Fifty hours.                                   | Professor Pounder. |

- 20—Dirichlet's Series and Theory of Numbers. Seventy-five hours.  
Professor Webber.
- 21—Theory of Potential. Solutions of Dirichlet's Problem. Twenty-five hours.  
Professor Chapelon.
- 22—Theory of Integral Equations. Twenty-five hours.  
Professor Chapelon.
- 23—Foundations of Geometry. Fifty hours.  
Professor DeLury.
- 24—Tensor Calculus. Fifty hours.  
Mr. Stevenson.
- 25—Actuarial Science: Frequency Curves and Correlation, Measurement of Groups and Series. Fifty hours. Professor Mackenzie.

Candidates taking a Major in Mathematics may select as one Minor any of the above courses except Nos. 1 and 2. The second Minor may be selected from any of the Minors offered by departments of the University other than Mathematics.

Courses Nos. 1 and 2 constitute a Minor in Mathematics (Mathematics A) for departments other than Mathematics, Physics, and Astronomy. The department is prepared to offer other Minors which must be arranged by consultation with the staff in Mathematics and the staff of the department in which the major subject lies.

Courses Nos. 1 to 4 are offered each year in the Undergraduate Courses in Honours.

In the session 1926-27, Courses 8, 13, 16, 17, 20, 21, 22, 24 were given as announced.

The selection of courses to be given in the academic year 1927-1928 will be made at the opening of the session.

## PHYSICS

### DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations.

### DEGREE OF DOCTOR OF PHILOSOPHY

Candidates for admission to the degree of Doctor of Philosophy must have a competent knowledge of Mathematics and Chemistry.

Candidates may proceed to the degree of Doctor of Philosophy in this Department in either of the following major divisions:—

- Experimental Physics.
- Mathematical Physics.

### COURSES OF INSTRUCTION

- 1—The Electromagnetic Theory of Light and the Electron Theory of Matter. Fifty lectures.  
Professor McLennan.

- 2—On the Properties of molecules, atoms, electrons and atomic nuclei, together with a discussion of modern theories of magnetism. Fifty lectures. Professor McLennan.
- 3—On the Origin of Radiation, on the characteristics of series spectra and on the structure of atoms and atomic nuclei. Fifty lectures. Professor McLennan.
- 4—Classical Theories of Radiation and applications of the Quantum Theory to Thermal Radiation, Specific Heats and Photoelectricity. Fifty lectures. Professors McLennan and Satterly.
- 5—The Principle of Relativity with Applications. Fifty lectures. Professors McLennan and McTaggart.
- 6—Mathematical Theory of Electricity and Magnetism. Fifty lectures. Professor Burton.
- 7—Elasticity and Elastic Solid Theory of Light, Polarisation. Fifty lectures. Professor Burton.
- 8—Properties of Matter. Fifty lectures. Professor Satterly.
- 9—Advanced Heat and Thermodynamics. Fifty lectures. Professor Satterly.
- 10—Theory of Optics. Fifty lectures. Professor Gilchrist.
- 11—Wave Motion in Elastic Media. Fifty lectures. Professor Gilchrist.
- 12—The Physical Properties of Colloidal Solutions. Twenty-five lectures. Professor Burton.
- 13—Vector Analysis. Twenty-five lectures. Professor Burton.
- 14—Generalized Coordinates and their application to Physical Problems. Twenty-five lectures. Professor Burton.
- 15—Conduction of Electricity in Gases and Radioactivity. Twenty-five lectures. Professor Satterly.
- 16—Vapour Pressure, Osmotic Pressure and Related Phenomena. Twenty-five lectures. Professor Satterly.
- 17—Theory of Measurements. Twenty-five lectures. Professor Satterly.
- 18—Acoustics, Fourier's Series and its applications to Physics. Twenty-five lectures. Professor Gilchrist.
- 19—Geometrical Optics. Thirty-five lectures. Professor McTaggart.
- 20—Hydromechanics. Twenty-five lectures. Professor McTaggart.
- 21—Modern Optical Instruments, with an introduction to practical computing. Twenty-five hours. Professor McTaggart.

*Note*—Laboratory work in the majority of the above courses will be offered, but such work will not count for more than twenty per cent. of the whole course.

22—Physics Seminar. This organization consisting of all instructors, graduate students, and advanced students in the department meets fortnightly on Thursdays from 4.15 to 6 o'clock for the discussion of recent research.

Candidates for the Degree of Doctor of Philosophy taking their major subject in either Experimental or Mathematical Physics may select but one Minor from the department of Physics. This Minor may be either one of Courses 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, or two of Courses 12, 13, 14, 15, 16, 17, 18, 19, 20, 21. The second minor may be selected from Mathematics, Astronomy, Chemistry A, B, C, D, E, or Mineralogy A, B, C, Geophysics, Physical Botany.

The following Minors are available in the Department:

Physics A—One of Courses 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11.

Physics B—Two of Courses 12, 13, 14, 15, 16, 17, 18, 19, 20, 21.

## BIOLOGY

### DEGREE OF MASTER OF ARTS

Graduate work leading to the degree of Master of Arts is offered in the various subjects enumerated below under "Courses of Instruction". Except in special cases, candidates will be expected to qualify in accordance with Section 20, 1. (b) of the regulations.

### DEGREE OF DOCTOR OF PHILOSOPHY

Graduate work leading to the degree of Doctor of Philosophy is offered in the divisions indicated, subject to the following conditions:

1—Students electing major work must possess adequate qualifications for beginning work of a graduate character in the major subject, must be able to search the literature in the modern foreign languages, and must possess a competent though elementary knowledge of Physics and Chemistry. For the final examination a knowledge of the general field of Biology will be considered necessary. The thesis must include an original contribution to the knowledge of the subject.

2—Students electing major work must have their entire course of study approved by the instructor in charge of the major subject.

3—Students electing major work may not select more than one Minor out of the subjects separately listed as Minors for this Department.

4—Students electing minor work must have their selection approved by the instructor in charge of the subject.

5—The standing to be attained in a minor subject shall be understood to be in general equivalent to Honour standing in the four-hour course of a corresponding subject of the Fourth Year undergraduate course, except in special cases in which (a) exemption or part exemption from one Minor may be granted to students who already have competent knowledge of the subject, or (b) other requirements may be made depending on the previous training of the student.

Major work is offered in the following subjects:

Vertebrate Zoology.	Histology.
Invertebrate Zoology.	Embryology.
Limnobiology.	Animal Genetics.
Marine Biology.	Comparative Neurology.
Entomology.	

## COURSES OF INSTRUCTION

- 1—†General Biology: A course of lectures and conferences on the general problems of Biology. Professor Coventry.
  - 2—\*Vertebrate Zoology: A laboratory course of 100 hours on the system, morphology and distribution of the Vertebrates. Professor Bensley.
  - 3—\*Invertebrate Zoology: A laboratory course of 100 hours on the system, morphology and distribution of the Invertebrates. Professor Walker.
  - 4—\*Limnobiology: A course on the system, morphology and oecology of fresh-water organisms, with special reference to fishery problems. Professors Walker and Dymond.
  - 5—‡Marine Biology: Special research on the oecology of marine organisms. Professor Huntsman.
  - 6—‡Entomology: A course on the morphology, classification and oecology of the Insects, with special research; in conjunction with Course 3. Professor Walker.
  - 7—†Animal Histology: A laboratory course of 100 hours on animal histology and cytology including histological technique. Professor Piersol.
  - 8—\*Microscopic Anatomy of Vertebrates: A laboratory course of 100 hours including histological technique. Professor Piersol.
  - 9—\*Vertebrate Embryology: A laboratory course of 100 hours on the general embryology of Vertebrates. Professor Piersol.
  - 10—\*Animal Genetics: A course on the principles and problems of Heredity, Variation and Breeding of Animals. Professor MacArthur.
  - 11—\*Comparative Neurology: A course on the composition of the nervous system in the mammalia and lower vertebrates. Professor Craigie.
  - 12—\*Experimental Embryology: A course on the history, methods and results of experimental embryology. Professor Coventry.
- Note*—Courses indicated\* are offered as Minors, or in conjunction with advanced work, literature, problems and research in a special division of the field as Majors.
- Courses indicated † are offered as Minors only.
- Courses indicated ‡ are available as Majors only, and must be taken in conjunction with the subjects specified.
- Except for the conditions mentioned above (Sections 1-4), no restrictions

are imposed with reference to the selection of major and minor subjects. Students are advised, in making a preliminary choice of subjects, to keep in view the possible requirements of their future fields of work.

## ASTRONOMY

### DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations.

### DEGREE OF DOCTOR OF PHILOSOPHY

This department is not prepared at present to accept candidates for the degree of Doctor of Philosophy.

The following Minors are available for candidates taking their Major in other departments:

Astronomy A—The Application of Physical Methods to Astronomical Problems. Fifty lectures. Professor Chant.

Astronomy B—Spherical Astronomy, including the use of the Nautical Almanac and exercises in computing. Forty lectures. Professor Chant.

Astronomy C—The Theory of Eclipses and Occultations, with practical work in the computation of Eclipses. Twenty-five lectures and twenty-five laboratory periods. Professor Young.

Astronomy D—Advanced work in the theory of selected lines of research in Astronomy, and the Application of Statistics to Stellar Problems. Fifty lectures. Professor Young.

## BOTANY

### DEGREE OF MASTER OF ARTS

Graduate work leading to the degree of Master of Arts is offered in the various subjects enumerated below under "Courses of Instruction". Except in special cases, candidates will be expected to qualify in accordance with Section 20, 1. (b) of the regulations.

### DEGREE OF DOCTOR OF PHILOSOPHY

Graduate work leading to the degree of Doctor of Philosophy is offered subject to the following conditions:

1—Students electing major work must possess adequate qualifications for beginning work of a graduate character in the major subject, and must possess a satisfactory elementary knowledge of Physics and Chemistry. For the final examination a knowledge of the general principles of Biology will be necessary. The thesis must include an original contribution to the knowledge of the subject.

2—Students electing major work must have their entire course of study approved by the instructor in charge of the major subject.

3—Students electing major work may not select more than one Minor from the list enumerated below.

4—Students electing minor work must have their selection approved by the instructor in charge of the subject.

5—The standing to be attained in a minor subject shall be understood to be in general equivalent to Honour standing in the four-hour course of a corresponding subject of the Fourth Year undergraduate course, *except* in special cases in which (a) exemption or part exemption from one Minor may be granted to students who already have competent knowledge of the subject, or (b) other requirements may be made depending on the previous training of the student.

Major work is offered in the following subjects:

Cryptogamic Botany.  
Phanerogamic Botany.  
Plant Anatomy.  
Plant Oecology.  
Plant Physiology.  
Plant Pathology  
Plant Genetics.

#### COURSES OF INSTRUCTION

- 1—\*Cryptogamic Botany I: A lecture and laboratory course of 100 hours on the system and morphology of the Bryophyta and Pteridophyta. Professor Faull.
- 2—\*Cryptogamic Botany II: A lecture and laboratory course of 100 hours on the system and morphology of the Algae, Fungi, Bacteria, and Slime-moulds. Professor Faull.
- 3—\*Mycology: A special course on the system, morphology, and biology of the Fungi. Professor Faull.
- 4—\*Phanerogamic Botany: A laboratory course of 100 hours on the morphology of Angiosperms, Gymnosperms and related fossil forms. Professor Thomson.
- 5—†Anatomy of Gymnosperms: A special course on the comparative anatomy of the Gymnosperms; in conjunction with Course 4. Professor Thomson.
- 6—\*Plant Physiology: A lecture and laboratory course of 100 hours on the physiology of plants. Professor Duff.
- 7—\*Oecology and Plant Geography: A course of 100 hours on plant associations, the adaptations of plants to environmental factors, and geographical distribution. Professor Sifton.
- 8—\*Palaeobotany: A special course on fossil plants. Research in conjunction with course 5. Professor Thomson.
- 9—\*An experimental and seminar course on the principles of genetics. Professor Thomson.
- 10—Plant Pathology. Professor Coleman.
- 11—Forest Pathology. Professor Faull.
- 12—Poisonous Plants. Professor Sifton.



- 13—Biology of seeds. Selected topics on the morphology, physiology, oecology and taxonomy of seeds. Professor Sifton.

*Note*—Courses indicated\* are offered as Minors, or in conjunction with advanced work, literature, problems and research in a special division of the field as Majors.

Courses indicated ‡ are available as Majors only, and must be taken in conjunction with the subjects specified.

Except for the conditions mentioned above (Sections 1-4), no restrictions are imposed with reference to the selection of major and minor subjects. Students are advised, in making a preliminary choice of subjects, to keep in view the possible requirements of their future fields of work.

## ZYMOLOGY

### DEGREE OF MASTER OF ARTS

Candidates for this degree will be required to show that they have reached the standard for the degree of B.A., or its equivalent, in at least two of the following subjects: Biochemistry, Organic Chemistry, General Physiology or Plant Physiology. In addition to work done in prescribed courses candidates are required to present a thesis based on research work done in the Department.

### DEGREE OF DOCTOR OF PHILOSOPHY

Candidates for this degree will be required to show that they have reached graduate standing in two or more of the subjects enumerated above. The thesis presented with the application must constitute a distinct contribution to the knowledge of the subject. Candidates are advised to choose Minors in accordance with the Regulations for the Degree from the following:

- Biochemistry 2 and 4.
- Pathology and Bacteriology 2.
- General Physiology 2 and 4.
- Organic Chemistry 1 and 2.
- Physics 11 and 16.

### COURSES OF INSTRUCTION

1. *Microbiology*: Course of lectures throughout the year on the theoretical aspects and practical applications of yeasts, molds and bacteria.
2. *Laboratory Course*: Conducted in conjunction with Course 1.
3. *Enzyme Chemistry*: Advanced lectures on the preparation and properties of enzymes and the theory of enzyme action.

Candidates taking a Minor in Zymology are required to attend Courses 1 and 2.

## ANATOMY

## DEGREE OF MASTER OF ARTS

Any of the minor courses described below may be taken as leading to the degree of Master of Arts. Course 5 is also open to those who have covered the ground represented by the Minors.

## DEGREE OF DOCTOR OF PHILOSOPHY

The work required of candidates for the degree of Doctor of Philosophy with a Major in Anatomy will be principally the preparation of a thesis based upon an investigation of some anatomical problem, together with the reading of the literature cognate to the research.

As a preliminary requirement it will be necessary that the candidate shall have taken a course in General Biology and courses in Vertebrate Anatomy (Biology Course 2), Human Anatomy, Anatomy of the Nervous System, Histology and Embryology. One of the last four courses may be taken as a Minor.

Candidates taking a Major in this Department are recommended to select their Minors from the departments of Anatomy, Zoology, Physiology, Biochemistry, and Pathology.

## COURSES OF INSTRUCTION

The following courses of instruction are offered by the department:

- 1—Human Anatomy. Laboratory and lectures. Sixteen hours a week throughout the year. Professors McMurrich, Watt and Cates.
- 2—Human Microscopic Anatomy. A laboratory course of 100 hours including histological technique. Professor Piersol.
- 3—Anatomy of the Nervous System. Lectures and Demonstrations. Sixty-four hours. Professor Linell.
- 4—Vertebrate Embryology. A laboratory course of 100 hours. Professor Piersol.
- 5—Advanced Human Anatomy. Laboratory and reading.

Professors McMurrich, Piersol, Watt, Linell and Cates.

Courses 1-4 are offered as minors. Course 5 is open only to those who have taken Courses 1-4. While the advanced work and research will lie mainly in one special field (Gross Anatomy, Neurology, Embryology, Histology) the subject selected will be followed into the associated fields, one of which may be selected as a Minor.

## BIOCHEMISTRY

## DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations. All candidates who have not previously taken the course of lectures and laboratory work in advanced Biochemistry (Biochemistry 2 and 4) or its equivalent, will be required to take this course.

## DEGREE OF DOCTOR OF PHILOSOPHY

Candidates for the degree of Doctor of Philosophy are required to submit a thesis which constitutes a distinct addition to the knowledge of the subject, and of such value as to merit publication in one of the leading scientific journals.

Candidates for the degree of Doctor of Philosophy in this department who do not intend taking Physiology as a minor are reminded that the relationship between these two Sciences is so intimate as to render a knowledge of the elements of mammalian physiology extremely advisable. Candidates are furthermore reminded that mathematics is becoming of very great importance in the investigation of the chemical phenomena of life, and they are strongly urged to acquire a knowledge of elementary differential and integral calculus and of statistical methods.

Students taking their major in Biochemistry may select their minors from any other division of graduate study offered by the University. The following subjects of study are, however, suggested as appropriate adjuncts to the study of Biochemistry:

Anatomy.  
Bacteriology.  
Biology.  
Botany.  
Chemistry.  
Histology.  
Household Science.  
Mathematics.  
Pathological Chemistry.  
Pathology.  
Pharmacology.  
Physics.  
Physiology.  
Psychology.  
Zymology.

Candidates for the degree of Doctor of Philosophy who desire to take a minor in Biochemistry will be required to pass an examination covering the field comprised in Courses 1, 2, 3 and 4.

## COURSES OF INSTRUCTION

- 1—General Biochemistry. Ninety Lectures.
- 2—Advanced Biochemistry. Sixty lectures.
- 3—A Laboratory Course in General Biochemistry. One hundred and twenty hours.
- 4—A Laboratory Course in Advanced Biochemistry.
- 5—Research in Biochemistry.
- 6—Seminar in Biochemistry.

## PHYSIOLOGY

## DEGREE OF MASTER OF ARTS

Candidates for the degree are accepted under the general regulations. All candidates will be required to show credits for all the courses of this department or their equivalent. Courses 1, 2, 4 and 5 must be completed before entering upon the work for the M.A. degree. The other Courses may be taken simultaneously.

## COURSES OF INSTRUCTION

The following courses of instruction each extending throughout the session are offered:

1. Systematic lectures; three a week.
  - (a) General and neuro-muscular physiology.
  - (b) Physiology of circulation, respiration, digestion and secretion.
  - (c) Metabolism, the functions of the ductless glands and reproduction.
  - (d) Physiology of the central nervous system and special senses.
2. Lectures in General Physiology.
3. Advanced lectures; two a week.
4. General Laboratory courses (total 180 hours).
5. Laboratory course in General Physiology.
6. Advanced Laboratory courses.
7. Research in Physiology.
8. Journal Club; one hour a week.
9. History of Physiology. A course of lectures supplemented by discussions towards which the students contribute (optional).

## DEGREE OF DOCTOR OF PHILOSOPHY

Candidates for the degree of Doctor of Philosophy are required to submit a thesis which constitutes a distinct addition to the knowledge of the subject, and of such value as to merit publication in one of the leading scientific journals.

Candidates for the degree of Doctor of Philosophy in this department who do not intend taking Biochemistry as a minor, or have not already taken the undergraduate courses in this subject are reminded that these two sciences are so intimate as to render a knowledge of general Biochemistry extremely advisable. They should at least take courses 1 (General Biochemistry) and 3 (a laboratory course in General Biochemistry) of the Department of Biochemistry. A general course in experimental Pharmacology is also almost essential. Certain courses in Biology, which should include vertebrate histology and cytology (7) comparative neurology (16) are of importance. A good training in Physics such as that mapped out for the honour degree in Physiology and Biochemistry is required. Similar courses in Mathematics are also required save in ex-

ceptional circumstances. Certain other courses in Physics are recommended. Students taking their major in Physiology may select their minors from any other division of graduate study offered by the University. The following subjects are suggested as appropriate, their relative importance as adjunct to the study of Physiology being indicated in a general way by the order in which they stand:

Biochemistry (1 and 3).  
Biochemistry (4).  
Pharmacology.  
Histology and Cytology (7 or 8 Biol.).  
Neurology (11 Biol. and 3 Anat.).

and one or more of the following:

Embryology (9 Biol.).  
General Biology (1 Biol.)  
Mathematics.  
Pathological Chemistry.  
Physics 7, 19, 21.  
Psychology.

When Physiology is taken as a minor, courses 1 and 4 are required as detailed above.

## FOOD CHEMISTRY

### DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations.

### COURSES OF INSTRUCTION

- 1—The Chemical Nature of the Constituents of Foods. Lectures and laboratory work.
- 2—Fundamental Studies of Nutrition. Lectures and laboratory work.

## PATHOLOGY AND BACTERIOLOGY

### DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations.

### DEGREE OF DOCTOR OF PHILOSOPHY

Candidates for the degree of Doctor of Philosophy are required to submit a thesis which constitutes a distinct addition to the knowledge of the subject, and of such value as to merit publication in one of the leading scientific journals.

Candidates in this department may proceed to the degree in either of the following major division:

Experimental Pathology.

Bacteriology, including Immunology.

As these two departments are closely inter-related candidates are reminded that either major division may necessarily include considerable work in the other and that consequently neither can be accepted as a minor.

Candidates taking Experimental Pathology are reminded that a pre-requisite for the study of experimental pathology is a knowledge of Physiology and those who do not propose taking Physiology as a minor must show credits of undergraduate work of honour standing.

Candidates taking Bacteriology and Immunology must similarly take Biochemistry or Pathological Chemistry as a minor or show credits of honour undergraduate standing in these subjects.

The following subjects are suggested as minors:

Physiology 1 and 4.

Biochemistry 1 and 4.

Pathological Chemistry 1, 3 and 4.

Chemistry 4 and 5.

Biology 1 and 8.

Physics 9 and 18.

Botany 2 or 3.

The following courses are offered as minors:

Bacteriology.

1—A laboratory course of one hundred and twenty hours in the principles and technique of Bacteriology and Immunology and the application of this subject to Medicine supplemented by a course of lectures (30 hours).

2—A laboratory course of sixty-five hours in Immunology.

General Pathology.

1—A course of lectures upon the principles of Pathology (50 hours), along with a laboratory of two hundred hours, illustrating the important phases of the subject.

## PATHOLOGICAL CHEMISTRY

### DEGREE OF DOCTOR OF PHILOSOPHY

Candidates proceeding to the degree of Doctor of Philosophy in this department must cover the field of Pathological Chemistry in addition to the investigation of some selected problem.

Students taking their Major in this department are recommended to select their Minors from the following:

Chemistry, A or C.

Biochemistry.

Physiology.

Pathology.

# COURSES OF INSTRUCTION

- 1—General Pathological Chemistry. Thirty lectures.
- 2—Special Pathological Chemistry. Reading and Seminars.
- 3—Elementary Laboratory Course. Sixty hours.
- 4—Advanced Laboratory Course. Thirty hours.

The following Minor is offered by the department:

Pathological Chemistry A—Courses 1 and 3.

## CHEMISTRY

### DEGREE OF MASTER OF ARTS

A student who is proceeding to the degree of Master of Arts in accordance with the general regulations must consult the staff as to the selection of suitable courses of study.

### DEGREE OF DOCTOR OF PHILOSOPHY

The thesis submitted for the degree of Doctor of Philosophy in this department must constitute a distinct contribution to the knowledge of the subject.

The following major divisions leading to the degree are offered:

Organic Chemistry.

Physical Chemistry.

Candidates taking a Major in either of these divisions may not select as Minors Chemistry A, C. The following Minors are recommended:

*Major subject*—Organic Chemistry.

*Minors*—Chemistry D.

and

Bio-chemistry A, Pathological Chemistry A, or Botany 6.

*Major subject*—Physical Chemistry.

*Minors*—Chemistry B, Mathematics A, Physics A or Physics B.

### COURSES OF INSTRUCTION

The following courses of instruction are open to graduate students. The selection of any of these courses presupposes an adequate knowledge of elementary Chemistry.

- 1—Systematic Organic Chemistry. Fifty lectures. (Open only to students who have already attended a preliminary course).

Professor Allan.

- 2—Practical Organic Chemistry. Seventy-five hours.

- 3—Advanced Organic Chemistry: Heterocyclic Compounds, Synthetic Methods, Stereochemistry. Fifty lectures.

Professor Allan.

- 4—Physical Chemistry. Fifty lectures. (Open only to students who have already taken a preliminary course and have had instruction in the calculus.)

Professor Kenrick.

- 5—Practical Physical Chemistry. Seventy-five hours.
  - 6—Advanced Physical Chemistry: The Phase Rule and Chemical Thermodynamics. Seventy-five lectures. Professor Miller.
  - 7—Chemical Theory. Sixty hours.
  - 8—Mathematical Chemistry. Sixty hours.
- The following Minors are offered by this department:
- Chemistry A—Courses 1 and 2.
  - “ B—Course 3.
  - “ C—Courses 4 and 5.
  - “ D—Course 6.

## GEOLOGY AND PALÆONTOLOGY

### DEGREE OF MASTER OF ARTS

Candidates for the degree of Master of Arts are accepted in this department under the general regulations.

### DEGREE OF DOCTOR OF PHILOSOPHY

Candidates for the degree of Doctor of Philosophy are required to submit a thesis that constitutes a distinct addition to the knowledge of the subject. In addition to the necessary preparation in Geology, a candidate must possess an adequate knowledge of the cognate sciences—Biology, Chemistry, Physics, and Mineralogy.

The following divisions constitute Majors in this department:

- Geology.
- Stratigraphical Geology and Palæontology.
- Economic Geology.

### COURSES OF INSTRUCTION

The courses of instruction open to graduate students are given below. None of these courses, as part of either a Major or a Minor, may be taken by a candidate without a preparatory knowledge of the subject:

- 1—Dynamical and Structural Geology. Fifty lectures. Professor MacLean.
- 2—Invertebrate Palæontology. Fifty lectures on Morphology and Classification. Professor Parks.
- 3—Practical Invertebrate Palæontology. Seventy-five hours. Professor Parks.
- 4—Precambrian Geology. Twenty-five lectures. Professor Moore.
- 5—Glacial Geology and Physiography. Twenty-five lectures. Professor MacLean.
- 6—Economic Geology. Fifty lectures. Professor Moore.
- 7—Stratigraphical Geology. One hundred hours lectures and laboratory. Professor Parks.



- 8—Mining Geology. Twenty-five lectures. Professor Moore.  
 9—Practical Economic Geology. Fifty hours. Professor Moore.  
 10—Metamorphism. Twenty-five lectures, accompanied by laboratory work. Professor Moore.  
 11—Geological Climatology. Twenty-five lectures. Professor MacLean.  
 12—Advanced Stratigraphy and Palæontology. One afternoon a week covering the geological column in three years. Session of 1927-28, the Mesozoic. Professor Parks.  
 13—Palæontology. Twenty-five lectures on special topics selected from year to year. Session of 1927-28, the Brachiopoda. Professor Parks.  
 14—Principles of origin and occurrence of economic mineral deposits. Professor Moore.  
 15—Geological Seminar. One hour per week.  
 16—Field work. (a) Pleistocene Geology, two weeks; (b) Precambrian Geology, two weeks; (c) Palæozoic Geology, two weeks.  
 Required of all candidates for Ph.D., unless equivalent work is accepted by the staff.  
 17—Sedimentation. One afternoon a week throughout the year. Professor Parks.

Candidates pursuing a Major in any of the divisions of the department may select one but not two Minors from the departments of Geology and Mineralogy combined. The following Minors are recommended for candidates taking a Major in this department:

MAJOR:	MINORS RECOMMENDED.
Geology.	Mineralogy A, B, or C, and Chemistry E or Biology 3.
Stratigraphical Geology and Palæontology.	Geology A or C, or Mineralogy A and Chemistry E, or Biology 1, 8, or 11.
Economic Geology.	Geology A or B or Mineralogy A or C. and Chemistry C, or Physics A or B.

The following Minors are offered by the department:

- Geology A—Courses 1, 4, and 5.  
 Geology B—Courses 2, 3, and 7.  
 Geology C—Courses 6, 8, and 9.

## MINERALOGY

### DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations.

### DEGREE OF DOCTOR OF PHILOSOPHY

In addition to the necessary preparation in Mineralogy proper, a candi-

date for admission to Mineralogy as a Major must possess an adequate knowledge of the cognate sciences—Chemistry, Physics, and Geology.

The thesis submitted for the degree must indicate that the candidate has made a distinct contribution to the knowledge of his subject.

#### COURSES OF INSTRUCTION

- 1—Systematic Mineralogy. A course of twenty-five hours lectures and twenty-five hours laboratory. Professor Parsona.
- 2—Morphological Crystallography. A course of twenty-five lectures. Professor Walker.
- 3—Blowpipe Analysis and Determinative Mineralogy. Seventy-five hours laboratory. Professor Thomson.
- 4—Determinative Mineralogy. Fifty hours laboratory in continuation of No. 3. Professor Thomson.
- 5—Practical Crystallography. Seventy-five hours crystal measurement, drawing, projection, etc. Professor Parsona.
- 6—Physical Mineralogy. A course of twenty-five lectures and twenty-five hours laboratory. Professor Walker and Assistants.
- 7—Petrography. Twenty-five hours lectures and laboratory. Professor Walker.
- 8—Advanced Petrography. Twenty-five lectures. Professor Walker.
- 9—Petrography. Fifty hours laboratory. Professor Walker.
- 10—History of Mineralogy. Twenty-five lectures. Professor Walker.
- 11—Optical Mineralogy. One hundred hours. Professor Walker.
- 12—Mineralography. Fifty hours. Professor Thomson.

The Minors offered by this department are not available for candidates taking Mineralogy as a Major. For such candidates the following Minors are recommended:

Geology A, or Geology B, or Geology C.  
and  
Chemistry C, or Chemistry E.

The following groups of courses constitute Minors in this department:

- Mineralogy A—Courses 1, 2, 3, 4 and 6.  
Mineralogy B—Courses 1, 2, 5, 6, 9 and 12.  
Mineralogy C—Courses 1, 2, 6, 7, 8, 9 and 12.

It is assumed that the candidate possesses a general acquaintance with the subject before entering on his studies as outlined above.

#### HYGIENE AND PREVENTIVE MEDICINE

##### DEGREE OF MASTER OF ARTS

A student who is proceeding to the degree of Master of Arts in accordance with the general regulations must consult the Head of the Department in reference to the selection of suitable courses of study.

# DEGREE OF DOCTOR OF PHILOSOPHY

Candidates for the degree of Doctor of Philosophy in this Department are required to submit a thesis, which constitutes a distinct contribution to the knowledge of the subject. The work required will be that necessary for the preparation of the thesis and a study of literature cognate to the subject under investigation.

The following Major Divisions leading to the degree are offered:

- Hygiene.
- Preventive Medicine.
- Physiological Hygiene.

Candidates taking their Major in this department are recommended to select their minors from the Departments of:

- Physiology.
- Biochemistry.
- Biology.
- Chemistry.
- Physics.

## COURSES OF INSTRUCTION

- 1—Hygiene and Preventive Medicine. Forty-two lectures and demonstrations.
- 2—Advanced Public Health Bacteriology and Immunology. Laboratory courses of about two hundred and fifty hours.
- 3—Public Health Chemistry. Laboratory course of about seventy-two hours.
- 4—Vital Statistics. Elementary laboratory course. About ninety hours.
- 5—Epidemiology. Laboratory course. About one hundred and forty hours.

## HOUSEHOLD SCIENCE

### DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations.

## COURSES OF INSTRUCTION

1. *Economics of the Household*—Lectures and discussions two hours a week.
2. *An Advanced Course in Economics of the Household*—Reading and discussions.
3. *Dietetics*—Lectures and laboratory work.
4. *Dietotherapy*—Lectures, laboratory work and discussions.
5. *Household Science Seminar*—One hour a week.

## ANTHROPOLOGY

## DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations.

- 1—Physical Anthropology. Comparative craniometry and the osteology of the different races of man. Professor McMurrich.
  - 2—Races of Man. The races of the world, their history and inter-relations, with broad outlines of their habitat and culture. Professor McIlwraith.
  - 3—Sociology and Religion. The social organization and religion of primitive man. How these two factors influence his life. Professor McIlwraith.
  - 4—The History of Art. Professor Currelly.
  - \*5—Archaeology. Primitive Handicraft; the tools and artifacts of primitive man. Illustrated by demonstrations and with practical museum work. Professor Currelly.
  - 6—The History of Anthropology. The principal theories and advances made in the subject. Professor McIlwraith.
  - 7—Language. The basis of language and phonetics. Professor McIlwraith.
  - 8—Folk-lore. Its relation to anthropology and history. Games. Professor McIlwraith.
  - 9—The Methods of Anthropology. Professor McIlwraith.
- \*Course 5 will not be offered during the Session 1927-1928.

## DEGREE OF DOCTOR OF PHILOSOPHY

While it is not thought advisable at present to offer courses leading to the degree of Ph.D. with Anthropology as a major study, that subject may be selected as a minor study with the approval of the Departments concerned.

## PHARMACOLOGY

## DEGREE OF MASTER OF ARTS

Candidates for this degree are accepted under the general regulations, if they have completed the course in Pharmacology of the Faculty of Medicine (IVth Year). They may be required to undertake a research and proceed by thesis or they may proceed by examination, in which case they will be required to take Course 2 offered below as a minor for the degree of Doctor of Philosophy or its equivalent.

## DEGREE OF DOCTOR OF PHILOSOPHY

Candidates wishing to take a minor in this subject are offered either of the two following courses.

- 1—General Pharmacology. A course of lectures, reading and conferences with certain laboratory experiments.

Professor V. E. Henderson.

- 2—Pharmaceutical and Pharmacological Chemistry. A course of lectures, conferences and reading with certain laboratory experiments.

Dr. G. H. W. Lucas.



---

FACULTY OF DENTISTRY

---

## HISTORICAL

In 1868 the legislature of the Province of Ontario passed an Act incorporating the members of the Dental profession in the Province as the Royal College of Dental Surgeons of Ontario with the dual function of teaching and licensing. The Dentistry Act has been amended from time to time, the last revision having taken place in 1926. The affairs of the profession are under this Act, administered as a public trust through a Board of Directors elected biennially by licentiates residing within the Province, every licentiate by virtue of his title being a member of the College. The Minister of Education is ex-officio a member of the Board of Directors.

The School of Dentistry of the Royal College of Dental Surgeons was established in 1875, and affiliated with the University of Toronto in 1889, which established the degree of Doctor of Dental Surgery and adopted the curriculum of the School of Dentistry as the qualification for this degree.

Since 1893, the University and the College have conducted joint annual examinations for the degree of Doctor of Dental Surgery and for the title of Licentiate of Dental Surgery. Previous to that date each organization conducted a separate examination.

The certificate of Licentiate of Dental Surgery granted by the Royal College of Dental Surgeons is the only legal qualification for the practice of Dentistry in the Province of Ontario.

On July 1st, 1925, the School of Dentistry became the Faculty of Dentistry of the University, the Royal College of Dental Surgeons relinquishing to the University its function as a teaching body and retaining its function as the licensing body for the Province of Ontario.

In 1875 the School of Dentistry was opened at 46 Church Street; in 1878 it was moved to the south-west corner of Victoria and Richmond Streets; in 1886 it was moved to the upper two floors of 13 Louisa Street, in 1893 the remainder of the building was taken; in 1896 it was moved to 93 College Street, in 1902 these premises were enlarged; in 1909 it was moved to 240 College Street, and in 1920 the east wing of the present building was added.

A synopsis of the development of dental education in the province will be found on page 815.



## DEGREES IN DENTISTRY

The fifty-fourth session of the Faculty of Dentistry will commence on Tuesday, September 27th, 1927.

The degrees in Dentistry are:

Doctor of Dental Surgery—D.D.S.

Bachelor of Science in Dentistry—B.Sc. (Dent.).

Master of Science in Dentistry—M.Sc. (Dent.).

## DEGREE OF DOCTOR OF DENTAL SURGERY

The degree of Doctor of Dental Surgery is the regular degree to which a candidate is admitted upon the completion of the undergraduate course in Dentistry, and which is recognized by dental licensing boards as evidence of graduation. The degree does not confer the right to practise Dentistry. The candidate is required to obtain a license from the dental board of the province or state in which he desires to practise.

Regulations governing the Dominion Dental Council examinations may be found elsewhere in this Calendar. Ontario being an agreeing province, an undergraduate in this Faculty is admitted to the D.D.C. examinations and has the privilege of taking them in the Dental Building from time to time upon completion of the various subjects throughout the course.

A candidate for admission to the Faculty of Dentistry is required to produce satisfactory certificates of good character and of having completed the sixteenth year of his age on or before the first of October of the year in which he proposes to register.

Along with many other colleges and universities on this continent, this University requires six years beyond Arts Matriculation for graduation in Dentistry.

*In view of the change in entrance requirements to Honour Matriculation in 1927, applications based upon certificates other than those mentioned below will be given special consideration for the coming session.*

## REQUIREMENTS FOR ONTARIO CANDIDATES

An Ontario candidate for the degree of Doctor of Dental Surgery session 1927-28 must meet the following requirements as contained in paragraphs (A), (B) and (C):

(A) Present certificates giving him credit in the following subjects of Pass Matriculation:

LATIN (Authors and Composition)

ENGLISH (Literature and Composition)

HISTORY (British and Ancient) *or*  
BRITISH HISTORY AND MUSIC  
MATHEMATICS (Algebra and Geometry)  
EXPERIMENTAL SCIENCE (Physics and Chemistry) *or*  
AGRICULTURE (Parts I and II)

Any one of:

GREEK (Authors and Accidence)  
FRENCH (Authors and Composition)  
GERMAN (Authors and Composition)  
SPANISH (Authors and Composition)  
ITALIAN (Authors and Composition).

(B) Present certificates giving him credit in the following subjects of Honour Matriculation:

ENGLISH (Literature and Composition)  
ALGEBRA and GEOMETRY  
TRIGONOMETRY *or* HISTORY  
PHYSICS *or* CHEMISTRY

Any one of:

LATIN (Authors and Composition)  
GREEK (Authors and Composition)  
FRENCH (Authors and Composition)  
GERMAN (Authors and Composition)

*A candidate from Ontario who would be admitted unconditionally to the second year of the Faculty of Arts of this University may be admitted to the first year of the Faculty of Dentistry.*

(C) Attend the regular five-year course in this Faculty (five sessions of thirty-two weeks each) and pass the examinations of each session.

#### THE FIVE-YEAR DENTAL COURSE

The five-year dental course is designed to unify the cultural subjects, fundamental sciences and dental studies, as it is believed that cultural, scientific and professional development cannot be sharply differentiated, but should proceed concurrently throughout the entire dental course. The first year includes Physics, Chemistry, Biology, English Expression, Science and Civilization and short courses in Applied Psychology and Ethics, Comparative Dental Anatomy, Drawing, Preventive Dentistry and Hygiene. In addition a course is given in the Principles of Dental Technology, with laboratory classes, for the purpose of instructing students in technical procedures and commencing even at this early period, to train them in digital skill. From session to session as the course proceeds greater attention is given to dental subjects, until in the fourth and fifth years, half the time is devoted to dental and medical clinics, lectures and laboratory work, and half to the actual practice of dentistry for patients in the Faculty Infirmary under the direction of the Clinical Staff.

REQUIREMENTS FOR CANADIAN CANDIDATES FROM  
ELSEWHERE THAN ONTARIO*Admission to First Year*

A candidate who has taken his High School course in a province other than Ontario and has obtained complete matriculation in a provincial university, may be admitted to the first year of the five-year dental course upon presenting the Arts matriculation certificate and a certificate of the successful completion of one year's work in High School beyond matriculation (usually known as Grade XII or Senior Matriculation) or of one complete year in the Faculty of Arts or other certificate equivalent to the Honour Matriculation standing required of Ontario candidates.

*Admission to Second Year*

Provision is made that candidates from outside the Province of Ontario may be admitted to the second year of the five-year course, proceeding to the degree of Doctor of Dental Surgery in four years. Such candidates must meet the following requirements as contained in paragraphs (A) and (B):

(A) Present certificate of complete Arts matriculation in a Canadian or other recognized university outside of the Province of Ontario;

(B) Present either:

- (1) A certificate of the successful completion of one academic year's work in High School beyond matriculation (usually known as Grade XII or Senior Matriculation), and in addition one college year in a provincial university; or
- (2) A certificate of the successful completion of two college years in a provincial university.

The college years (pre-dental) referred to in (1) and (2) may be taken in the Faculty of Arts, Medicine or Dentistry.

In order to enter the second year of the five-year course, in all cases the two years of work beyond Arts Matriculation must include the following classes: English, Chemistry (covering both organic and inorganic), Physics and Biology. In addition to these subjects, the candidate is required to obtain sufficient other credits to make two complete years of work. The remaining subjects necessary to meet the requirements of two complete academic years should be selected upon the advice of the authorities of the University of which the candidate is a student, and the certificate of such University will be accepted as evidence of successful completion of these requirements.

*Admission to Third, Fourth and Fifth Years*

Applications for admission to advanced standing in the five year course must in every case be accompanied by preliminary and Dental credentials.

### REQUIREMENTS FOR CANDIDATES FROM ELSEWHERE THAN THE DOMINION OF CANADA

An applicant for admission who has received his education elsewhere than in the Dominion of Canada must possess equivalent qualifications to those required of a Canadian candidate.

### REGISTRATION

A student desiring to enter the course in Dentistry is required to submit his application form in duplicate, along with the certificates on which he claims entrance standing, to the Registrar of the University, in Simcoe Hall, on or before August 30th. Each candidate will be notified as to whether his application has been accepted or not—a card of admission will be enclosed to each applicant who is accepted.

On presentation of this card on or before the day of registration, September 27th, to the Secretary of the Faculty of Dentistry, accompanied by receipts from the successful tenderers for books and instruments (see page 14), the candidate will be officially registered by him as an undergraduate in Dentistry.

On September 27th a student shall present himself in person at the Dental Building for his registration card. No student shall be allowed to register in the Faculty of Dentistry after the first day of the term except by the permission of the Faculty Council. Such consent will not be given after ten days. Every petition for registration subsequent to September 27th, 1927, must be accompanied by a sum of money reckoned at one dollar per diem for each day after September 27th. For sufficient cause the whole or part of such a sum may be refunded.

No student shall be permitted to register in the second or any succeeding year until he has completed all the examinations of the preceding year.

Only under exceptional circumstances shall a student be permitted to repeat his year more than once.

### APPLICATION

All candidates for entrance to the Faculty of Dentistry of the University of Toronto are required to sign the following application form:

To the Faculty of Dentistry, University of Toronto.  
Gentlemen:

Should I be admitted as a Student of Dentistry, it is with the distinct understanding:

(a) That I will comply with the requirements of the Faculty of Dentistry respecting Matriculation, Pupilage and Payment of Fees.

(b) That it is my present intention to complete the full course of study in the Faculty of Dentistry of the University of Toronto.

(c) That in pursuing this Study, I will attend regularly all prescribed didactic, laboratory and infirmary instruction in each of the several years, and will give diligent attention to the work required of me.

(d) That I will endeavour at all times to promote good fellowship among my class mates, and to maintain and protect the reputation of the University.

(e) That during my course I will loyally conform to the requirements of the Dentistry Act, 1926, and of the By-Laws, Rules and Regulations prescribed from time to time by the Royal College of Dental Surgeons of Ontario as necessary to secure needful order and discipline.

(f) That when authorized to practise Dentistry, I will conduct my practice ethically, and will make every reasonable effort to elevate the Profession of Dentistry and maintain its dignity and good name.

(g) That I am registered on probation, and will withdraw upon request should the Faculty Council determine such a course advisable.

#### ADMISSION TO ADVANCED STANDING IN DENTISTRY

A dental student of another University or College who desires to be admitted to the Faculty of Dentistry of this University with equivalent standing is required to communicate with the Registrar of the University, forwarding to him a full statement of preliminary education with certificates and:

(a) A calendar of the University in which he has studied, giving a full statement of the courses of study;

(b) A complete official statement of the course he has followed and the standing obtained in percentage;

(c) A certificate of moral character and conduct.

After submission of this application the candidate will be notified as to the decision reached by the Faculty Council.

No student in Dentistry from another University will be accepted unless his certificates show that he has completed without condition the work and examinations in the subjects for which the certificates are presented.

*A graduate of any faculty of a recognized university may be admitted to the second year of the five-year course, provided his studies included the subjects of Biology, Chemistry and Physics.*

*A graduate of any recognised dental faculty or college, after attendance of one session in the fifth year, and passing all examinations of that year, may qualify for the degree of Doctor of Dental Surgery.*

Candidates admitted to advanced standing and proceeding to the degree of Doctor of Dental Surgery are required to write only upon the examinations of the year or years in which they are enrolled. All candidates desiring to qualify for license to practice dentistry in the Province of Ontario, however, are required to write upon such examinations as may be specified by the Licensing Board of the Province of Ontario.

For detailed information regarding licensure, see page 816.

# REGULATIONS

## AUTHORIZED TEXT-BOOKS

Each student before registration will be required to present a receipt from the *official supplier*, certifying to the possession of the authorized text books called for in his year.

The Students Book Department, University of Toronto, will be the official supplier for the session 1927-28. The exact price of the authorized text books will be posted on the notice board at the time of registration, but for purposes of estimate the following prices may be taken as approximate:

First Year....	\$29.00
Second Year..	52.00
Third Year..	51.00
Fourth Year..	33.00
Fifth Year.....	8.00

A list of the text books is shown on page 795.

## AUTHORIZED INSTRUMENTS AND SUPPLIES

In order to ensure that every student will have a complete outfit of approved instruments the Faculty Council in co-operation with representatives of the Students' Parliament, called for tenders, and awarded contracts for students' instrument kits for First, Second, Third, Fourth and Fifth Years, as shown hereunder. Each student before registration will be required to present a receipt from the *official supplier* certifying to his possession of the authorized instruments and supplies called for in his year. This requirement will obviate delay in class work through students being unprepared to proceed with their work.

Students enrolled for advanced standing are required to purchase items of earlier years as directed.

### First Year:

Sections DJI, DS, G, HM, LMS, National Refining Company...	\$ 60.15
Sections CT, CDJM, CHM, CLMS, National Refining Company	3.25
Section T, Aikenhead Hardware Limited...	10.00
Section DO, The Hughes Owens Co. Ltd.....	5.25
Section DJM, Dental Co. of Canada.....	3.50

### Second Year:

Section A, Ash-Temple Co.....	100.45
Section B, National Refining Company	26.15
Section D, Dental Co. of Canada.....	33.60

*Third Year:*

Section A, National Refining Company.. . . .	80.65
Section B, Goldsmith Bros... . . . .	18.50
Section C, National Refining Company... . .	27.40

*Fourth Year:*

National Refining Company.. . . .	96.55
-----------------------------------	-------

## DENTAL ENGINES

Each Second Year student is required to provide himself with a dental engine at a date of which the head of the Operative Department will advise him.

He is left free to make his own selection of an engine, but tenders have been received as shown hereunder, at which price he may purchase one during the Session 1927-1928:

*Ash Foot Engines*

<i>Cable Type</i> —Complete with slipjoint, No. 7, and Contra-Angle Handpieces.....	\$50.00
<i>All Cord Type</i> —Complete with Doriot Handpiece and Contra-Angle Attachment.....	55.00

*S.S.White Foot Engines*

<i>Cable Type</i> —Complete with slipjoint, No. 7, and Contra-Angle Handpieces.....	63.75
<i>All Cord Type</i> —Complete with Doriot Handpiece and Contra-Angle Attachment .....	67.50

## ATTENDANCE

All students are expected to attend all lectures, clinics and laboratories. An allowance of 10% will be made in the case of clinics or laboratories for illness or unavoidable absence and 25% for the same cause for lectures. Students failing to attend 75% of their lectures or 90% of their laboratories or clinics may not be admitted to examinations in the subjects concerned.

All technique work in all years must be done in the Faculty laboratories under the direction of the staff and in accordance with the regulations laid down by the Department concerned. Work must be completed by the specified time and handed to the Demonstrator for submission to the Examiner.



## STUDENT INDENTURES—SHIP—SUMMER INFIRMARY SESSION

A student who has completed the Fourth Year is required, during the summer, either to be indentured with an approved Licentiate for at least two months, or spend one month in satisfactory service in the Infirmary. For this purpose the Infirmary will be open during May, June and September.

Before enrolment in the Fifth Year a student who has been indentured is required to present a certificate from his preceptor stating that he has rendered at least two months of satisfactory service in his office, and giving a summary of the work accomplished.

During the period between sessions students of earlier years are urged to spend, under indenture, as much time as possible in the office of an approved practising Dentist.

A matriculated student, who has attended at least one session in the Faculty of Dentistry, and who, during any of the intervals between sessions, acts as assistant in the office of an ethical Dental Practitioner in Ontario, may place himself under the protection of the law by signing an agreement in the form approved by the Board of Directors of the Royal College of Dental Surgeons of Ontario and filing a copy with the Secretary of the Faculty. Upon application to the Secretary's office, blank forms will be furnished students for this purpose. Such agreements cover a period of five months only, and may be renewed, provided the applicant attends this Faculty during the interval.

Students are reminded that signing an agreement with a licentiate gives no legal right to perform dental operations elsewhere than under the immediate personal supervision of their preceptor or other licentiate. See Section 22 of the Dentistry Act.

No student shall, while in attendance at the Faculty of Dentistry, engage in practice for his own pecuniary benefit, either in the Infirmary or elsewhere; nor shall he at any time perform any dental operations elsewhere than in the Infirmary or under the supervision of his registered Preceptor. This regulation shall not prevent a regularly indentured student from receiving from his Preceptor remuneration for his services. Violation of this section will render the offender liable to immediate suspension from all the privileges of a student of Dentistry.

## EXAMINATIONS

Promotions from one year to another are made on the results of the term work and the annual examinations. A student proceeding to a degree must pass all the examinations in the subjects of his course and at the periods arranged from time to time by the Council.

Term examinations may be held in any subject and at any time at the discretion of the instructor or by order of the Council, and the results of such examinations may be incorporated with those of the annual examinations in the same subjects.

No candidate will be admitted to the Annual or Supplemental Examinations unless he has paid all the fees due from him.

A candidate in a course involving practical work in laboratory or clinic may be denied admittance to the Annual or Supplemental Examinations if the Professor under whom his work is carried on reports in writing to the Secretary that he has not done satisfactory laboratory or clinical work, or has signally failed in the practical examinations.

An undergraduate who has been prevented from attending the Annual Examinations by sickness, domestic affliction, or other causes beyond his control, may make application for permission to present himself for examination at the Supplemental Examinations in September, enclosing satisfactory evidence of the cause of absence.

The Supplemental Examinations will begin on the 6th day of September, 1927. Notice in writing of his intention to take such examinations must be received from the candidate by the Secretary of the Faculty, and the fee of \$10 received by the Bursar, not later than August 8, 1927. Council reserves the right to reject applications of, or impose penalties upon, those failing to comply with these requirements.

Term credits are determined by reports from the staff based upon the following considerations:

- (1) Attendance;
- (2) Attention to duties;
- (3) Oral or written examinations;
- (4) Practical work.

Pass standing must be obtained in all laboratory courses, independent of written paper, unless excused by the Faculty.

Technique cases presented for examination later than the date specified may be accepted, but shall in no case receive more than a pass credit.

No supplemental courses will be held in laboratory, infirmary or clinical work.

#### PASS STANDARDS

The minimum pass standard in each subject of examination is 50%.

A statement will be sent to each student showing the rank he obtained in each subject of the Annual Examinations and also his standing in the class.

Rank in each subject will be indicated as follows:

- A. 75—100;
- B. 66—74;
- C. 50—65;
- D. Below 50—Failure.

Answer papers will be re-read in each subject in which a candidate obtains less than 50 per cent., and no appeal will be considered for further re-reading of such papers. *In no case will marks be given to the candidate.*

A candidate with D standing in any laboratory or clinical course, or with D standing in three or more written examinations will not be permitted to take supplemental examinations, but will be required to repeat the entire work of the year including all examinations. In the case of First Year students, permission to repeat the year will be granted by the Faculty Council only under exceptional circumstances.

A candidate with D standing in one or two written examinations may present himself at the supplemental examinations next ensuing.

#### REMOVAL OF CONDITIONS

Students of the Faculty of Dentistry are required to remove all conditions in a lower year before proceeding to a higher year. In view of this regulation, and as a convenience to students from outside the Province of Ontario, written supplemental examinations may be held in any Province of Canada during September of each year.

Arrangements will be made for students to write these examinations at the several provincial universities at the following points:

Vancouver, B.C.	Winnipeg, Man.	St. John, N.B.
Edmonton, Alta.	Toronto, Ont.	Halifax, N.S.
Saskatoon, Sask.	Montreal, Que.	Charlottetown, P.E.I.

As students are not permitted to register until all conditions are removed, it is recommended that students who write these examinations at points outside the Province of Ontario remain at their home addresses until they receive notice by telegram of the removal of their conditions.

Owing to the greater time involved in arranging for examinations at points outside Toronto, it is necessary that applications for such examinations be in the hands of the Secretary by June 25th.

#### REQUIREMENTS FOR GRADUATION

To be of good moral character.

To be of the full age of twenty-one years.

To have complied with the regulations of the Faculty of Dentistry respecting Matriculation.

To have successfully completed the course in the Faculty of Dentistry, or its equivalent.

#### REGULATIONS RELATING TO STUDENTS IN ATTENDANCE

No student will be allowed to continue in attendance, whose presence is deemed by the Council of the Faculty to be prejudicial to the interests of the University.

Students proceeding regularly to the degree are required to attend the courses of instruction and the examinations in all subjects prescribed for students of their respective standing, and no student will be permitted to remain in the University who persistently neglects academic work.

Students of the Faculty of Dentistry, on the premises of Colleges or Faculties other than those in which they are registered, shall be subject to the regulations and penalties imposed by the administrative authorities of the premises concerned.

The Students' Administrative Council has been entrusted by the Caput with supervision of the conduct of the students, and, subject to the approval of the Caput, has power, through the Students' Court or otherwise, to deal with violations of the regulations governing conduct.

All interference on the part of any student with the personal liberty of another by arresting him, or summoning him to appear before any unauthorized tribunal of students, or otherwise subjecting him to any indignity or personal violence, is forbidden by the Caput.

No initiation ceremony involving physical violence, personal indignity, interference with personal liberty or destruction of property may be held by the students of any Faculty or College of the University under the penalty of suspension or expulsion.

Any ceremony connected with the reception of the First Year desired by any Faculty or College must be prepared and carried out by a Committee of the Senior Year of the Faculty or College concerned with the approval of a joint committee of the Caput and the Students' Administrative Council. The holding of such ceremonies except with this approval shall constitute a breach of discipline.

Any student who may be convicted of having taken part in a parade or procession through the city which has not been authorized by the police authorities, after application by the Executive of the Students' Administrative Council, will be severely disciplined.

A student who is under suspension, or who has been expelled from the University, will not be admitted to the University buildings or grounds.

The constitution of every University society or association of students in the Faculty of Dentistry and all amendments to any such constitution must be submitted for approval to the Caput. All programmes of such societies or associations must, before publication, receive the sanction of the Caput through the President. Permission to invite any person not a member of the faculty of the University to preside at or address a meeting of any society or association must be similarly obtained.

The name of the University is not to be used in connection with publication of any kind without the permission of the Caput.

Smoking is prohibited in or about the Dental Building.

## PHYSICAL TRAINING

By order of the Board of Governors each male student proceeding to a degree must take Physical Training in the first and second years of his attendance. In each session in which Physical Training is compulsory he must first undergo a medical examination by the Director of the University Health Service and must then register for Physical Training at the office of the Athletic Association in Hart House. Students of all years who wish to take part in any form of athletics or physical exercise must first undergo a medical examination by the Director.

Each woman student proceeding to a degree in Dentistry and enrolled in the Faculty of Dentistry shall be required, during the first year of her attendance, to take Physical Training following upon an examination by the Medical Advisor for Women.

The student who has failed to complete satisfactorily the course in Physical Training prescribed for the First Year, will not be permitted to register in the Third Year; and the student who has failed to complete satisfactorily the course in Physical Training prescribed for the Second Year, will not be permitted to register in the Fourth Year.

The student who has neglected to complete satisfactorily the course in Physical Training of the First or Second Year, must take this work during the Second or Third Year respectively of his course, and will be required to pay a supplemental fee of \$10 in addition to the prescribed Physical Training fee.

## FEES

## UNIVERSITY FEES

All University fees are payable at the office of the Bursar of the University, Simcoe Hall, between the hours of ten and one o'clock, except on Saturday.

Every student proceeding to the degree of Doctor of Dental Surgery shall, in each of the First, Second, Third, Fourth and Fifth Years pay an annual fee, including tuition, library, laboratory supply, and one annual examination as follows:

If paid in full on or before October 20th..... \$200.00

By instalments—

First instalment, if paid on or before October 20th . . . . . 100.00

Second instalment, if paid on or before January 20th.... . 103.00

All the above fees are payable in advance. After October 20th, a penalty of \$1.00 per month will be imposed until the whole amount is paid. In the case of payment by instalments the same rule as to penalty will apply. A student will not be admitted to any of the University lectures or laboratories who is in arrears for his fees.

## MATRICULATION FEE

Registration of Matriculation certificates. . . . . \$5.00

This fee is required from all students entering the first year oncertificates other than those issued by the Matriculation Board of the Province of Ontario.

## DEGREE FEE

Degree of D.D.S.... . \$10.00

## HART HOUSE FEE

The annual fee..... \$8.00

Every male student in attendance proceeding to the degree of Doctor of Dental Surgery is required to pay to the Bursar before December 1st the annual fee of eight dollars for the maintenance of Hart House. If this fee is not paid by the above date a penalty of two dollars will be imposed, making the total fee ten dollars.

## STUDENTS' ADMINISTRATIVE COUNCIL FEE

The annual fee..... \$4.00

Every male student in attendance proceeding to the degree of Doctor of Dental Surgery is required to pay to the Bursar at the time of the entry of his name with the Registrar the annual fee of four dollars for the maintenance of the Students' Administrative Council.

## WOMEN STUDENTS' ADMINISTRATIVE COUNCIL FEE

The annual fee.....\$4.00

Every woman student proceeding to the degree of Doctor of Dental Surgery is required to pay to the Bursar at the time of the entry of her name with the Registrar the annual fee of four dollars for the maintenance of the Women Students' Administrative Council.

## MEN'S PHYSICAL TRAINING FEE

The annual fee.....\$5.00

Every male student in attendance proceeding to the degree of Doctor of Dental Surgery is required to pay to the Bursar the annual Physical Training fee of \$5.00 at the opening of each session in which Physical Training is compulsory for such student.

## WOMEN'S PHYSICAL TRAINING FEE

The annual fee.....\$4.00

Every woman student in attendance proceeding to the degree of Doctor of Dental Surgery is required to pay to the Bursar the Physical Training fee of \$4.00 at the opening of each session in which Physical Training is compulsory for such student.

## SUPPLEMENTAL PHYSICAL TRAINING FEE

The supplemental fee.....\$10.00

Every student who has neglected to complete satisfactorily the course in Physical Training of the First or Second Year and who must take this work during the Second or Third Year respectively of his or her course, will be required to pay to the Bursar at the opening of the session a supplemental fee of \$10.00 in addition to the prescribed Physical Training fee.

## SUPPLEMENTAL EXAMINATION FEES

Written Supplemental Examinations in any one year.....\$10.00

## AD EUNDEM FEE

For admission to advanced standing.....\$10.00

(To be paid by all candidates for *initial* registration when such occurs in a year other than the first.)

## FACULTY FEES

## STUDENTS' PARLIAMENT FEE

The annual fee.....\$4.00

Every student proceeding to the degree of Doctor of Dental Surgery shall pay to the Secretary of the Faculty at the opening of the Session an annual fee of \$4.00 for the maintenance of the Students' Parliament of the Faculty of Dentistry.

## CAUTION AND DEPOSIT FEE

The annual fee..... \$10.00

Every student of the Faculty shall pay to the Secretary at the time of registration a Caution Fee of \$10, out of which charges for waste, neglect and breakage will be met. The balance will be refunded to the student at the end of the session on application to the Secretary.

If the foregoing deposit does not cover the cost of breakage due to carelessness or neglect, the balance shall be paid by the student to the Secretary and in default of such payment the results of his examination will be withheld.



## ESTIMATE OF EXPENSES

## FIRST YEAR

Tuition Fee.....	\$200.00
Caution Fee.....	10.00
Students' Parliament Fee.....	4.00
U. of T. Students' Administrative Council.....	4.00
Hart House, Men's Fee.....	8.00
Physical Training, Men's Fee.....	5.00
Text-books.....	20.00
Instruments.....	82.15
Miscellaneous Supplies.....	5.00

---

\$347.15

For women students, the physical training fee is \$4.00, and there is no Hart House fee. Total expenses, women students.. \$338.15

## SECOND YEAR

Tuition Fee.....	\$200.00
Caution Fee.....	10.00
Students' Parliament Fee.....	4.00
U. of T. Students' Administrative Council.....	4.00
Hart House, Men's Fee.....	8.00
Physical Training, Men's Fee.....	5.00
Text-books.....	52.00
Instruments.....	160.20
Dental Engine.....	50.05
Miscellaneous Supplies.....	5.00

---

\$507.25

For women students, there is no physical training in Second Year, and no Hart House fee. Total expenses, women students..... \$494.25

## THIRD YEAR

Tuition Fee.....	\$200.00
Caution Fee.....	10.00
Students' Parliament Fee.....	4.00
U. of T. Students' Administrative Council.....	4.00
Hart House, Men's Fee.....	8.00
Text-books.....	51.00
Instruments.....	126.55
Miscellaneous Supplies.....	5.00

---

\$408.55

For women students, no Hart House fee..... \$400.55

## FOURTH YEAR

Tuition Fee.....	\$200.00
Caution Fee.....	10.00
Students' Parliament Fee.....	4.00
U. of T. Students' Administrative Council .....	4.00
Hart House, Men's Fee.....	8.00
Text-books.....	33.00
Instruments.....	96.55
Miscellaneous Supplies.....	5.00
	<hr/>
	\$360.55
For women students, no Hart House fee.....	\$352.55

## FIFTH YEAR

Tuition Fee.....	\$200.00
Degree Fee.....	10.00
Caution Fee.....	10.00
Students' Parliament Fee.....	4.00
U. of T. Students' Administrative Council.....	4.00
Hart House, Men's Fee.....	8.00
Text-books.....	8.00
Miscellaneous Supplies.....	5.00
	<hr/>
	\$249.00
For women students, no Hart House fee.....	\$241.00

*By arrangement between the Royal College of Dental Surgeons of Ontario and the University of Toronto a graduate of this Faculty, upon successful completion of the five years of the course, may receive a license to practice Dentistry in Ontario without additional fee.*

## CURRICULUM SESSION 1927-1928

## FIRST YEAR

SUBJECT	DIDACTIC	LABORATORY	TOTAL
Biology and Comparative Dental			
Anatomy.....	90	180	270
Chemistry, General.....	60	180	240
Dental Praxis.....	20		20
Dental Technology.....	5	75	80
Drawing.....		75	75
English Expression.....	30		30
First Aid.....	5		5
Hygiene.....	2		2
Physics.....	90	90	180
Preventive Dentistry.....	3		3
Science and Civilization.....	60		60
	365	600	965
Compulsory Physical Training.....			760
Total.....			1,025

## SECOND YEAR

SUBJECT	DIDACTIC	LABORATORY	TOTAL
Anatomy.....	30	185	215
Chemistry, Analytical.....		30	30
Chemistry, Organic.....	15		15
Dental Anatomy.....		210	210
Histology.....	60	120	180
Metallurgy.....	5		5
Mineralogy.....	5	20	25
Operative Dentistry.....		90	90
Physiology.....	20		20
Preventive Dentistry.....	3		3
Prosthetic Dentistry.....	10	220	252
Crown and Bridge Prosthesis.....	2	20	
	150	895	1,045
Compulsory Physical Training.....			60
Total.....			1,105

## THIRD YEAR

SUBJECT	DIDACTIC	LABORATORY	TOTAL
Applied Chemistry and Metallurgy.....	30	100	130
Bacteriology.....	15	60	75
Biochemistry.....	30	30	60
Chemistry, Organic..	30	30	60
Dental Surgery and Anaesthesia.....	15		15
Histology.....	15		15
Materia Medica and Pharmacology..	15	30	45
Operative Dentistry..	10	300	310
Orthodontia.....	15		15
Physiology.....	35	60	95
Preventive Dentistry..	4		4
Prosthetic Dentistry	10	120	252
Crown and Bridge Prosthesis	2	120	
Radiography.....	4		4
Total.....	230	850	1,080

## FOURTH YEAR

SUBJECT	DIDACTIC	LABORATORY AND CLINICAL	TOTAL
Anatomy Review.....	3		3
Applied Physics.....	10	20	30
Bacteriology and Pathology..	30	80	110
Biochemistry.....	5		5
Ceramics.....	5		5
Clinical Dentistry.....	15		15
Crown & Bridge Prosthesis..	15	20	35
Dental Praxis.....	15		15
Dental Surgery and Anaesthesia..	25		25
Operative Dentistry.....	25		25
Orthodontia.....	15	36	51
Periodontology.....	10		10
Preventive Dentistry.....	10		10
Prosthetic Dentistry.....	30		30
Public Speaking.....	10		10
Radiography.....	6		6
Surgery.....	15		15
Clinical Dentistry in Dental Infirmary and hospitals....		750	750
Total.....	244	906	1,150

## FIFTH YEAR

SUBJECT	DIDACTIC	CLINICAL	TOTAL
Clinical Dentistry.....	15		15
Crown and Bridge Prosthesis ..	5		5
Dental Pathology.....	15		15
Dental Praxis.....	23		23
Medicine.....	30		30
Operative Dentistry.....	30		30
Oral Surgery.....	15		15
Orthodontia Technique.....	2		2
Periodontology.....	10		10
Preventive Dentistry.....	15		15
Prosthetic Dentistry.....	10		10
Surgery.....	15		15
Clinical Dentistry in Dental Infirmaries and Hospitals....		965	965
Total.....	185	965	1,150

NOTE: The 750 hours in the Fourth Year and the 965 hours in the Fifth Year curricula apportioned to clinical dentistry in the Dental Infirmary and hospitals, embrace instruction in every phase of dental practice, including pedodontia, dental pathology and therapeutics, diagnosis, preventive dentistry, operative and prosthetic dentistry, radiography, dental surgery and anaesthesia, orthodontia, periodontia, and crown and bridge prosthesis. (See page 773.)

## OUTLINE OF COURSES OF INSTRUCTION

## ANATOMY

*Professor:* J. P. McMURRICH, M.A., Ph.D.

*Associate Professor:* J. C. WATT, M.A., M.D.

*Senior Demonstrator:* A. E. MONTGOMERY, M.B.

*Demonstrators:* G. L. CHAMBERS, M.B.; LORNE MURRAY, B.A., M.B.

## SECOND YEAR

The course in the gross anatomy of the human body runs throughout the second year, occupying one lecture hour and two laboratory periods of three hours each per week. During this course the student is required to dissect the whole head and neck, and to study in detail the structure and relations of all structures met during the dissection.

Special study of the bones of the skull is undertaken preliminary to the dissection of the head. Charts and drawings are used to demonstrate the various structures. Bones are provided by the Faculty, and are lent to the student.

The dissection is divided into several parts corresponding with the various regions into which the body is naturally subdivided. On completion of the work on each part every student is required to pass an oral test of his knowledge of the work recently done before proceeding to the next section. The series of marks obtained is the student's credit for term work. In addition, term and final examinations are held.

The practical application of the knowledge of the anatomy of each part is emphasized wherever possible. Lectures are so arranged as to review work recently done in the dissecting room, and to correlate and amplify and show the practical application of the knowledge gained there.

All the facilities of the dissecting room are of the latest and most complete character, and the student does his dissecting under the most favourable conditions in a recently constructed, well-lighted laboratory.

Closely related classes which are correlated with the gross anatomy and serve to further elucidate the structure of the human body and to show the practical application of this knowledge are Art (including modelling and drawing of bodily structures), Biology, Comparative Dental Anatomy, Dental Anatomy, Histology, Embryology, Physiology and Applied Anatomy.

A series of five demonstrations will be given to students of the second year to show the anatomy of the various viscera of the thorax and abdomen. For these demonstrations the class will be divided into small sections, each in charge of a demonstrator, so that every student will have full opportunity to profit by the course.

## FOURTH YEAR

A short course of lectures will be given to students of the fourth year on the anatomy of the mouth and closely associated parts such as the nose and the pharynx. This is in the nature of a review for association with clinical work.

## APPLIED CHEMISTRY, PHYSICS AND METALLURGY

*Professor:* THOMAS COWLING, M.A., D.D.S.

*Lecturer:* COLIN C. ROUS, B.A.Sc.

This course which, in part, deals with the chemistry of dental materials and processes, is designed primarily for the purpose of teaching the properties of the various materials used in dentistry. In view of the fact that much of the success of many dental operations depends not only upon the skill of the operator but also upon the suitability of the materials used, an exact knowledge of their properties is requisite.

## SECOND YEAR

The course in this year is divided into two parts, viz.: Dental Metallurgy and Mineralogy.

*Dental Metallurgy*—A lecture course of five hours. The physical properties of metals are discussed and the important relationship of these properties to various dental operations is emphasized. In these introductory lectures an effort is made to explain the difficulties commonly experienced when working metals. This course serves as an introduction to the practical exercises undertaken in the Metallurgical, Prosthetic and Operative Departments.

*Mineralogy*—Lectures and laboratory. The lecture course of five hours includes an explanation of common mineralogical terms, the occurrence of minerals, crystal forms, physical and chemical properties of minerals, etc.

The laboratory course of twenty hours treats mainly the methods of identification of minerals and the determination of the more important elements occurring in them. The metallic and non-metallic mineral specimens selected for study by blow-pipe and wet methods are chiefly those which comprise the sources of supply of the commonly used dental materials.

Emphasis is placed upon the naturally occurring impurities in minerals, and the effect of such impurities upon the properties of the reduced products.

## THIRD YEAR

The course in this year is divided into Metallurgy, Applied Chemistry and Dental Ceramics and consists of thirty lectures and one hundred laboratory hours.

The metals used in dentistry are discussed with respect to their occurrence, reduction, properties and dental applications. A description of the rare metals is also given and their possible dental uses indicated. Methods of alloy-making are discussed and both physical and chemical means of testing them are explained. In these lectures the properties and dental uses of the precious metals and their alloys are especially emphasized.

Through the actual working of metals it is possible to acquire a considerable knowledge of their properties and this is of great assistance to students in dentistry. Hence a laboratory course of ninety hours is given. It includes such exercises as the preparation of alloys, amalgams, etc., and the determination of their properties; the refining of gold, silver, and platinum; the preparation of solders; the qualitative analysis of alloys; the quantitative analysis of alloys by both volumetric and gravimetric methods; annealing and tempering; the preparation and classification of dental cements; the preparation of low-fusing alloys; methods of melting and casting metals; classification and dental uses of abrasives; purification of mercury, etc.

Throughout this course the relationship existing between the inherent properties of dental materials and the specific uses for them is constantly stressed. In this way it is possible to overcome much of the confusion that frequently occurs in the selection and manipulation of dental materials.

In the division of Applied Chemistry the chemistry of dental materials and processes is chiefly dealt with and a consideration of many reactions made use of in the laboratory and surgery is included.

The properties and uses of dental porcelains and refractories are carefully considered. This course which supplements the work of the Second Year in Mineralogy treats not only with the sources of supply and the properties of all the constituents of dental porcelain and refractories, but also explains the methods of selection, manipulation, etc. Through the tests made upon the crude as well as the refined ceramic materials, an intimate knowledge of their composition and properties is acquired.

#### FOURTH YEAR

In addition to the lectures which, for the most part, deal with Applied Mechanics and the Strength of Materials, there is a laboratory course in Applied Physics.

In this course considerable time is spent in an intensive study of the physical properties of dental materials: cements, alloys, amalgams, porcelains, plasters, vulcanite, etc., are tested for tensile, compression, and flexure stresses, etc. In addition, attention is given to the effect of fatigue tests or repeated stress tests as these are definitely related to dental problems.



With these tests it is possible not only to demonstrate the methods of manipulation calculated to produce the best results with dental materials, but also the relative permanency of the various filling materials when subjected to stresses.

Such problems as the volume and dimensional changes in cements, plasters, vulcanite, amalgams, etc., are experimentally considered; also the thermal conductivity of the numerous materials used in operative and prosthetic procedures.

Obviously, the inclusion of a course in Applied Physics in the curriculum of the fourth year makes possible the testing out, by the student, of many of the materials employed by him in the infirmity operations and the laboratory technique.

### BIOCHEMISTRY

*Professor:* ANDREW HUNTER, M.A., B.Sc., M.B.

*Fellow:* M. A. COX, M.B.

*Demonstrator:* J. M. LUCK, B.A., PH.D.

#### THIRD YEAR

Lectures—Thirty hours. The lectures deal with the chemical nature and composition of the body, the food and the excreta; with the processes of digestion, intermediary metabolism, respiration and excretion; with the balance of material and of energy in the living organism; and with the general principles of nutrition.

Laboratory—Thirty hours. The laboratory course deals with the chemistry of protein, fat and carbohydrate; changes produced in food by digestive enzymes; the composition of teeth, saliva and some common foods; and the qualitative analysis of urine.

#### FOURTH YEAR

Lectures—Five hours. This course deals with certain applications of biochemistry and of the science of nutrition to preventive dentistry.

### BIOLOGY AND COMPARATIVE DENTAL ANATOMY

*Professor:* B. A. BENSLEY, B.A., PH.D.

*Assistant Professor:* W. H. T. BAILLIE, M.A., M.B.

The course in Biology deals with the general nature of living organisms, and is introductory to the study of several branches in the intermediate and higher years. It is sub-divided as follows:

(1) A course of sixty lectures on types and principles, including the cell-basis of organisms, differentiation, heredity, the chief types of organisms, with sufficient study of the vertebrates to establish and illustrate the principles of comparative dental anatomy.

(2) A course of thirty lectures dealing with the cell-basis in relation to development and adult structure, with special reference to the organ-systems of the mammalia. This course is explanatory of the practical work of the laboratory.

(3) A laboratory course of one hundred and eighty hours on the study of a selected series of types, illustrating the reactions of cells, organology, the elements of mammalian anatomy and histology, and a comparative study of tooth structure and development in the lower animals and in the mammalia.

## CHEMISTRY

*Professor of Organic Chemistry:* F. B. ALLAN, M.A., PH.D.

*Professor of Chemistry:* F. B. KENRICK, M.A., PH.D.

*Associate Professor of Analytical Chemistry:* L. J. ROGERS, B.A.Sc., M.A.

*Lecturer in Chemistry:* A. R. GORDON, M.A., PH.D.

*Assistants in Chemistry:* JOHN CRYER, M.A.; F. J. FARNCOMB, M.A.;

G. F. BROWN; G. MACKINNEY, B.S.A.; W. B. MATHER.

The course in Chemistry extends through the First, Second and Third Years. In the early part of the course, the fundamentals of Inorganic and Organic Chemistry are taught; in the latter part, special attention is paid to applications of dental importance. Wherever possible experimental illustrations are given in all lecture courses.

### FIRST YEAR

**Lectures**—Sixty hours, extending throughout the session. The course includes the history, properties, methods of preparation, of the most important elements and compounds, with their common commercial applications; classification; general laws and principles; and the fundamental theories of the science.

**Laboratory**—One hundred and eighty hours. The course is initiated with experiments of a general nature, serving to illustrate the lectures. Attention is paid to the manipulation and care of apparatus, to the preparation and study of important elements and compounds, including quantitative analysis.

### SECOND YEAR

**Lectures**—Organic Chemistry—Fifteen hours. A general introduction to Organic Chemistry, dealing with the various series of compounds, their co-relations, properties and preparation of characteristic members.

**Laboratory**—Analytical Chemistry—Thirty hours. General methods of analysis are considered.

## THIRD YEAR

Lectures—Organic Chemistry—Thirty hours. The lecture course in Organic Chemistry is completed during the first semester and serves as a preparation for the subsequent work in Biochemistry.

Laboratory—Organic Chemistry—Thirty hours. The student is required to make some organic preparations and to become acquainted with the chemical properties of compounds dealt with in the lecture course. Upon completion of this course given in the first semester the student proceeds with the Biochemistry course during the second semester.

## CLINICAL DENTISTRY

*Professor:* A. D. A. MASON, D.D.S.

*Associates:* J. A. BOTHWELL, D.D.S.; G. H. CORAM, D.D.S.; B. O. FIFE, D.D.S.; H. A. HOSKIN, D.D.S.; H. A. ROSS, D.D.S.; S. M. RICHARDSON, D.D.S.; W. G. SWITZER, D.D.S.

*Demonstrators:* G. D. BEIERL, D.D.S.; F. L. COLE, D.D.S.; H. H. CUMMER, D.D.S.; J. H. DUFF, D.D.S.; K. R. HARRIS, D.D.S.; W. L. HUGILL, D.D.S.; W. T. HOLMES, D.D.S.; G. V. MORTON, D.D.S.; J. M. SHELDON, D.D.S.; F. H. SHEPHERD, D.D.S.; R. R. WALKER, D.D.S.; R. S. WOOLLATT, D.D.S.

*Public Health Service:* E. A. GRANT, D.D.S., Director of Dental Service, Department of Health, City of Toronto.

*School Children's Clinic:* C. F. LEWIS, D.D.S.; J. T. IRWIN, D.D.S.

*Hospital Dental Clinic:* W. S. MADILL, D.D.S., Western Hospital.

It is in this department that the application of the fundamental sciences to the practice of dentistry is made. The student is trained in actual service for the patient. The Clinical Department is responsible for the conduct of the Dental Infirmary and for all services to the patients as well as for the carrying out in the Infirmary of the teaching of all the departments of the school.

The Clinical Staff endeavours to correlate the principles taught in all the departments throughout the course and to demonstrate to Fourth and Fifth Year students their application to actual dental practice. Numerous clinics are given from time to time during the session in the various branches of dentistry, and arrangements are made for students to visit the private offices of practitioners. Clinics in surgery, oral surgery and medicine are held in different hospitals in the city.

On the main floor of the Dental Building are located the reception and consultation rooms, as well as rooms for Dental Surgery and Anaesthesia. The Infirmary proper occupies the whole third floor and has high ceilings, excellent lighting and modern equipment. There are ample facilities for

giving the student a splendid opportunity to apply and demonstrate on patients, under the supervision of the Clinical Staff, his knowledge of the various subjects studied throughout the course.

The Fourth and Fifth Year student takes an hour lecture daily at 8.30 and the remainder of the day is divided, one half to clinics and laboratory procedures, and the other half to the actual practice of Dentistry.

The Fourth Year student, upon entrance to the Infirmary at the commencement of the session, assists a Fifth Year student in actual chairside practice, which permits him to become accustomed to the proper procedure with a patient without having to assume the actual responsibility of the case. He is also given instruction in various small groups by the Clinical Staff in final preparation for the assignment of patients.

A suggestion of the manner in which the various courses taken by the student during his five years are related to the Clinical Department follows:

*Pedodontia*—Students of the Fifth Year obtain proficiency in children's dentistry through an arrangement with the local Department of Health for the treatment of school children in the Faculty Infirmary.

*Chemistry*—The properties of many of the dental materials used in the clinic are studied in the Applied Chemistry Laboratory. A knowledge of Organic Chemistry and Biochemistry is essential in physiological problems and direct practical application in the Clinic is made in the analysis and study of saliva, blood and urine.

*Metallurgy*—Most of the dental materials used in the Infirmary have been prepared, tested and analyzed as exercises in the metallurgical laboratory, in which an effort is made to train the student to select dental materials from an actual knowledge of their known products and not from the trade literature alone.

*Bacteriology*—The training in the science of Bacteriology is put into practice in the Clinic in the diagnosis of morbid conditions of the oral cavity. Students are taught the practical application of Bacteriology to the practice of dentistry in all its phases, diagnosis of oral and dental infections and their relation to systemic diseases, sterilization of instruments and of office equipment, and cleanliness both as regards the operator and patient. Bacteriological tests are applied to root canal operations and to extracted teeth.

*Pathology*—The science of general dental and Dento-Histo-Pathology is applied in the Clinic. Each student is required to make a study of special cases presented at the Clinic held each week.

*Therapeutics* (including Electro-Therapeutics)—Demonstrative teaching is given of the value of the more common therapeutic agents, including the special adaptation of electricity to the diagnosis and treatment of dental lesions.

*Dental Anatomy*—The anatomical restoration of lost dental structures is required in all operative and prosthetic operations.

*Diagnosis*—To develop individual judgment, patients are assigned to each student who is required to make a diagnosis of the conditions in the mouth and the relation of them to the general health of the patient.

*Preventive Dentistry*—The application of the teaching of Preventive Dentistry in all its branches is made in the Clinic. Special Clinics in Oral Prophylaxis are given on the subject and the student is taught to observe and record those factors which influence susceptibility and immunity to dental diseases.

*Operative Dentistry*—In the Operative Clinic the student is given a splendid opportunity to put into practice the teachings of the operative department. Special Clinics are given in the different branches of this work, including porcelain inlays and jacket crowns.

*Dental Radiography*—The X-ray room adjoining the Clinic is equipped with modern apparatus applicable to dental office practice. After a review of the methods of regulating equipment, exposure, development, fixing, etc., lectures are given on the reading of negatives with special attention to the diagnosis of pathologic and other abnormal conditions. Clinics are given in the various phases of this subject.

*Dental Surgery and Anaesthesia*—All surgical operations practised by the dental surgeon are taught to students in small groups. This insures personal instruction in apicoectomy, removal of cysts, carious bone and exodontia, under both local and general anaesthesia. Students are given practical demonstrations in the proper insertion of the hypodermic needle and a review of the anatomy of the parts concerned.

*Orthodontia*—A special clinic on Orthodontia is held twice a week throughout the session. Students are required to treat actual cases in the mouth.

*Periodontia*—Students are instructed in the practical treatment of patients suffering from every phase of this disease. Special attention is given to the proper use of the tooth brush, care of the mouth and the adjustment of the occlusion.

*Prosthetic Dentistry*—In the Prosthetic Department the student is required to construct for patients a number of separate cases, applying all of the principles taught in the course. Special demonstrations and Clinics are given on both full and partial denture prosthesis.

*Crown and Bridge Prosthesis*—The practical application of Crown and Bridge Prosthesis in all its branches is made in the Clinic.

*Dental Economics*—The student is taught to make practical application of the instruction given in this subject. The clinicians keep constantly in mind the training of the student in the general questions of management of patient and office and the importance of cleanliness, habit, dental records, appointments, use of assistant, value of the dentist's time, and the general application of the science of economics to dental practice.

*Surgery and Oral Surgery*—Cases are shown in the Toronto General Hospital in a course of thirty clinical demonstrations to which the students are assigned in small groups.

*Medicine*—Clinics are held in the Dental Infirmary and bed-side instruction is given to students in groups in the Medical Wards of the Toronto Western Hospital.

## DENTAL ANATOMY

*Professor:* S. S. CROUCH, D.D.S.

*Demonstrator:* W. F. ARMSTRONG, D.D.S.

*Instructor in Modelling:* MISS MERLE FOSTER, A.O.C.A.

The course in this subject begins in the Second Year. Drawing and Modelling are taught and practised in conjunction with this subject. It is one of the foundation subjects upon which is based the study of Operative Dentistry, Prosthetic Dentistry, Crown and Bridge Prosthesis, Orthodontia, Exodontia, Periodontia, and Preventive Dentistry. It is closely associated with the subjects of Physiology, Histology, Bacteriology, Pathology and Oral Hygiene.

During the Second Year the course will consist of a minute study of the external and internal anatomy of the teeth of man and associated tissues, including the following: teeth of man—deciduous and permanent dentitions: general functions: process and time of calcification, eruption, absorption, succession: minute study of external anatomy of each tooth: functions of various parts of each tooth: arrangement in arch, relation to surrounding tissues, etc.: peridental membrane, alveolar process, etc.: occlusion and articulation: the temporo-mandibular articulation: effect of natural physical forces on shape of arches and, on occlusion: malformations due to loss of these forces: effects from habits, loss of one or more teeth, caries, diseases of surrounding tissues, etc.: changes in edentulous arch: internal dental anatomy of each tooth.

The course in Modelling has for its object the development of the sense of form and proportion in the student who is required to model in plasticine simple forms, such as cubes and square blocks, and to develop enlarged teeth from the blocks. Some of the teeth are enlarged five times in modelling clay, and others are carved in impression compound. These exercises are followed by the carving of the teeth in vegetable ivory, which requires an extensive laboratory course. Necessary instruction is given concerning the use and shape of each part of the tooth as it is carved.

Special study is given for the purpose of teaching occlusion, articulation and the relations of the different movements of the mandible that the student may be able to understand the normal movements and diagnose accurately cases that are not normal.

Studies in Internal Dental Anatomy include the making of cross and longitudinal sections of extracted teeth, and by close examination, demonstrations and lectures, the anatomy of the pulp chambers, root canals and apical foramina of all the teeth in the denture are carefully studied.

### DENTAL PRAXIS

*Professor: F. J. CONBOY, D.D.S.*

#### FIRST YEAR

##### *Psychology*

The object is to give the student a knowledge of Psychology and its relationship to attention during lectures, proper preparation of notes, analytic reading, memory development, etc., with a view to enable the student to develop ability, reliability, endurance and will-power, so that he may obtain the greatest possible advantage from the opportunities afforded by the College.

##### *Ethics*

The course will include a practical discussion of the underlying forces that enter into the formation of character and determine conduct. Heredity, environment and will, the human instincts and instinctive behaviour, impulse and desire, emotions and sentiments, conscience and will, character and conduct, and the moral self will be taken up in proper sequence.

There will follow a discussion of such subjects as the standard by which we judge our conduct and the conduct of others; the moral ideal, or man's great aim in life; why should I be good? what makes an action right? The hedonistic and rationalistic theories of life, the moral institutions of civilization (the home, the school, the church, the state), the proper relationship of the individual to the state, and of the state to the individual; professional men and women as exponents of true citizenship and lofty ideals.

#### FOURTH YEAR

##### *History of Dentistry*

The subject-matter to be presented is divided into a number of distinct parts, namely: dentistry of prehistoric times, ancient times, the middle ages, modern times, and the history of dental materials, methods and the development of the various special departments of the profession.

Particular attention is given to a description of the beginnings and development of Dentistry on this continent and especially in the Dominion of Canada.

In dealing with the lives of the outstanding members of the profession, the lecturer endeavours to so present the subject that the students are led to emulate their examples.

##### *Economics*

The lectures deal with the Science of Economics as applied particularly to Dentistry. The course covers those problems peculiar to Infirmary

practice, such as, Infirmary routine, making appointments, management of patients, dental supplies, sterilization, motion study and such personal factors as cleanliness, neatness, reliability and punctuality.

#### FIFTH YEAR

##### *Ethics*

In the Fifth Year the direct application of these principles to professional life will be discussed:—the Hippocratic oath, the professional ideal, the proper ethical relations of the dentist to his patients, to his confreres, and to the profession; the ethics governing consultations, advertising and patents, will be taken up.

##### *Economics*

In the Fifth Year the course is extended and directed along practical lines enabling the student to better understand the problems encountered in the conduct of a dental practice.

The lectures include a discussion of "Success in Dentistry" and how it may be accomplished, dealing with the dentist's personal preparation (mental, moral and physical), character study and management of office and patient.

Practice Building is presented, and in this connection lectures are given on office location, office arrangement and equipment, office records, stationery, supplies and the extending of acquaintance.

Particular attention is given to the stressing of the dentist's obligations to his patient and the public, showing the relationship between service rendered and the resulting reward. The question of dental fees, the accumulation of a competence, insurance and investments is also covered.

##### *Dental Jurisprudence*

The course will include a study of the constitutional rights of the State to control the practice of dentistry through its governing bodies; the legal responsibility of the dentist to the state, and to his patients; the legal field of dentistry; the different phases of malpractice; the position of the dentist as plaintiff, defendant and expert witness before the courts. The special Dentistry Acts of the different provinces will also be discussed.

### DENTAL SURGERY AND ANAESTHESIA

*Professor:* E. W. PAUL, D.D.S.

*Associates:* B. R. GARDINER, D.D.S.; F. S. JARMAN, D.D.S.; H. G. ROBB, D.D.S.

#### THIRD YEAR

##### *Exodontia and Dental Oral Surgery*

The whole subject of the extraction of teeth will be discussed at length and will include: The indications for extraction, a study of the anatomy of the teeth and the alveolar process, the selection of instruments and the



methods of using them, the proper application of force, the dangers to be avoided, the accidents which may happen and the procedure to be followed in avoiding or treating them, hemophilia and excessive hemorrhage and the treatment, the pre-operative and post-operative treatment of the mouth and patient in extensive or difficult extractions. The indications and contra-indications and the surgical technic in connection with curettage, alveolectomy and flap operations are thoroughly covered.

#### *Local Anaesthesia*

The different methods of infiltration or terminal anaesthesia are taught, and an outline given of the history and development of local anaesthesia. The various drugs used, and their physical and physiological action, the instrumentarium suggested and its care, the preparation of solutions, the accidents which may occur and their treatment, and the special technic involved in the above are discussed in detail.

### FOURTH YEAR

#### *Exodontia and Dental Oral Surgery*

The special technic and treatment necessary for the removal of suppressed and impacted teeth and cysts are dealt with.

#### *Local Anaesthesia*

Conduction or nerve-blocking anaesthesia with its indications and contra-indications is fully taught.

#### *General Anaesthesia*

The course in general anaesthesia will include a brief history of anaesthesia, the physiology of anaesthesia, the choice of an anaesthetic for dental operations, physical diagnosis, a consideration of the conditions under which general anaesthetics are contra-indicated, description and action of nitrous-oxide, nitrous-oxide and oxygen, somnoform, ethyl-chloride and ethylene, and the method of administration of each, the accidents which may occur, the best means of avoiding them, the proper procedure when they do occur and the after-treatment of the patient.

The examinations of the Fourth Year are based on the whole subject of anaesthesia and dental oral surgery.

### FIFTH YEAR

The Fifth Year receives more intensive and advanced instruction in the form of demonstrations and clinics.

Daily clinics are held in the Surgery Department where the students of the Fourth and Fifth Years perform the operations under the direction of a member of the staff.

## DENTAL TECHNOLOGY

*Professor:* W. E. CUMMER, D.D.S.

*Associate:* W. E. WILLMOTT, D.D.S.

*Instructor:* E. M. RIGSBY

*Technician:* W. V. BYRNE

## FIRST YEAR

The Dental curriculum lists thirty-one subjects, of which seventeen have a handicraft side. Out of these seventeen subjects the handicraft manipulations of nine are in constant use at the chairside or at the bench during routine general practice. It is the object of the Technology Course to consider these individual handicraft manipulations, with the underlying scientific basis of each. This is done with more convenience and concentration in a specially designed lecture and laboratory course.

Lectures—The individual handicraft operations contained in these subjects are listed on a Control Chart which shows, among other things, the manner of their occurrence in the seventeen dental subjects.

With the Control Chart in his hand, this is pointed out to the student, after the subject is defined, and its place in the reparative and reconstructive side of Dentistry and its relation to General Technology with its various crafts is outlined.

A study of each of the ten heads and their component handicraft operations then follows under these heads:

- (a) Definition, general and sub-classifications.
- (b) Applications in General Technology and in the more closely allied crafts. This includes: appliances, tools, instruments, their general construction and classification (using examples of dental manufacture).
- (c) Applications in Dental Technology.

The lectures conclude with suitable references to the following: interchangeable manufacturing, the tool room in general and dental manufacturing, automatic machinery, production and costs, comparative standards in dental instruments and equipment; observation, imagination, research and invention in technology.

Laboratory—A laboratory course in a specially equipped Technology Laboratory has been provided, in which the student becomes familiar with the ten groups of one hundred and seventy-two operations on materials, namely:

- 1. Laying out and reading drawings.
- 2. Heat treatment of parts, including hardening and tempering.
- 3. Forming, including rolling, bending, folding, molding, casting.
- 4. Cutting, including sectioning, scraping, chiselling, filing, sawing, drilling, boring, milling, burring, threading, etc.

5. Abrasion, including grinding, honing and lapping.
6. Measuring, various methods.
7. Assembly.
8. Processes, various.
9. Finishing, including polishing, burnishing, etc.
10. Maintenance.

Incidentally, the student produces a number of articles or projects which are useful to him in the Technology, as well as in subsequent courses.

## DRAWING

*Professor:* J. ROY COCKBURN, B.A.Sc.

*Assistant Professor:* W. J. T. WRIGHT, B.A.Sc.

### FIRST YEAR

This course of 75 hours is intended to give the student a general idea of the technique of drawing and to train him in the habits of accurate observation and appreciation of form and arrangement.

The models and problems are selected after conference with the other departments with a view to giving preliminary instruction in other subjects at the same time as the drawing itself is taught.

One of the important direct dental applications resulting is the training in the "pencil grasp", and the cultivation of a sense of touch which, while necessary for the drawing, is of great value later in the use of dental instruments.

## ENGLISH EXPRESSION

*Special Lecturer:* E. J. PRATT, M.A., Ph.D.

### FIRST YEAR

*Composition*—Four written and two oral compositions will be required during the year. Special attention will be given to clear and concise English. Practice will be afforded in making abstracts from good English prose to enable students to grasp the main thought in all their reading.

*Literature*—Oral reading and memorizing of certain passages, reading of standard English novels, dramas and poems with the emphasis upon modern developments. The cultivation of a taste for good reading rather than a critical study of the texts is to be regarded as the aim of the course.

In this course instruction will be given in the correct use of written and spoken English, and opportunity will be afforded each student to acquire experience in public speaking.

## HISTOLOGY, BACTERIOLOGY AND PATHOLOGY

*Professor of Pathology and Bacteriology:* O. KLOTZ, M.B., M.D., C.M.,  
McG.

*Professor of Dental Histology, Pathology and Bacteriology:* J. S. GRAHAM,  
M.B., M.R.C.S.

*Professor of Histology:* W. H. PIERSOL, B.A., M.B.

*Associates:* N. T. MACLAURIN, M.B.; MISS W. C. RIDDLE, B.A.

## SECOND YEAR

*Histology*

Elementary Histology is given in connection with the course in Biology in the first year. In the second and third years the minute study of the structure of the tissues and organs of the body is taken up, special attention being given to the tissues of the mouth and the upper and lower jaw. The development of the tooth, tooth structures and surrounding tissues is taught in detail. This study includes not only the human tooth, but those of other animals.

## THIRD, FOURTH AND FIFTH YEARS

*Bacteriology and Pathology*

This course includes lectures and laboratory work on the principles of Bacteriology, its application to Dentistry, and the relationship to disease. Special attention is given to the conditions in the mouth and related parts.

The laboratory work includes the preparation and care of culture media, sterilization, the classification of organisms, and the technique of diagnosis. The bacteria of the mouth are studied in detail, cases from the Infirmary being given special attention.

Lectures in General Pathology are given in the fourth year, and in the fifth year lectures and laboratory work in special pathology.

Towards the end of the course, so far as may be possible, student groups will be expected to make Bacteriological investigations from their own Infirmary cases.

A course of lectures covering the whole field of diseases of the teeth and their associated tissues will be given to the students of the Fifth Year. This study embraces pathological conditions of the enamel, dentine, pulp, pericementum, cementum, gingivae, and alveolar process. Special consideration will be given to the more important dental lesions, such as caries, alveolar abscesses, granulomata, cysts, rarefying and condensing osteitis, gingivitis and periodontitis. The whole subject will be covered, including a scientific study of the etiology, diagnosis, prognosis, and treatment of these pathological conditions.

The course will be both Didactic and Clinical. In the Infirmary of the Faculty the principles presented by this chair will be demonstrated in the mouth.

## MEDICINE

*Professor:* D. A. L. GRAHAM, M.B.

*Associate Professor:* F. A. CLARKSON, M.B.

## FIRST YEAR

*Hygiene*

Two lectures are given early in the session to the students of the first year on the general care of the body and on venereal diseases.

## FIFTH YEAR

*Medicine*

The course in Medicine includes lectures and clinics in physical diagnosis, lectures on etiology of diseases, disorders of nutrition and metabolism; and the exanthemata. Special attention is given to the relation between a septic condition of the oral cavity and gastric, neurotic and other functional disturbances, the symptomology of syphilis, and other important constitutional diseases as manifested in the oral cavity; and focal infection.

The clinics are held in the medical wards of the Toronto Western Hospital and in the Infirmary of the Faculty.

## OPERATIVE DENTISTRY

*Professor:* A. E. WEBSTER, M.D., D.D.S., Chic.

*Associate Professor:* J. W. CORAM, D.D.S.

*Associate:* L. F. KRUEGER, D.D.S., Iowa.

The subjects of this course extend over four years. Operative Dentistry is so intimately associated with Dental Anatomy that these courses run concurrently during the Second Year. The Fourth and Fifth Years are devoted to the application to practice of what has been learned.

## SECOND YEAR

The course in this year follows closely on the lectures and laboratory work in Biology, Embryology, General and Dental Anatomy and Histology, beginning with a discussion of their application to operative practice. The student selects many decayed teeth, and by actually cutting, splitting and grinding the enamel, he learns its behaviour under instrumentation. By the aid of such teeth he gets his first lessons in the cause of Dental Caries. The etiology of this disease is discussed, reference being made to the history, occurrence, distribution and predisposing factors. Various methods of treatment are presented, and in one or two general lectures the broad principles of disease and cure are given. Instruction in cavity preparation is given in lectures, demonstrations, recitations, and practice on large plaster teeth. The nomenclature of instruments and their uses are studied from time to time as required in the progress of the course.

The student gets instruction in the general principles of the casting process as applied in dental practice. He is required to make several castings so as to fasten the principles in his mind. The simple filling materials are studied during the closing days of the course.

#### THIRD YEAR

The course in the Third Year begins with a rapid review of dental anatomy, dental histology, dental caries and the principles of cavity preparation taught in the Second Year. The work of the previous year is extended to include the complex procedures of practice.

Cavity nomenclature and instrument study are carefully gone into. The study of cavity preparation in all its phases is completed. The properties, manipulation and insertion of the various filling materials are studied. Restorations are made in amalgam, gold inlays, gold foil, gutta percha, cement, silicate and porcelain. The casting process is studied more carefully and the making of inlays by the indirect and semi-indirect methods is taught. Special attention is given to the manipulation of porcelain in the construction of inlays and jacket crowns. Abutment preparations and attachments are made for teeth to be used in the Prosthetic Department. Many specimen operations and test fillings are required.

Lectures are given on the subject of pulpitis, dental alveolar abscess and pericementitis. The causes, pathology and treatment of these conditions are studied. The subject of dental therapeutics is introduced and the application of drugs is taught in the laboratory. Devitalization of the dental pulp and filling of root canals follows. Root canal treatment, curettage and root surgery are practised on extracted teeth and cadavers from the dissecting room.

Sterilization, asepsis, exclusion of moisture and aseptic operating are taken up in lectures, demonstrations and laboratory courses.

Each student is taught how to make radiographic pictures and develop films of teeth upon which he is operating as technique work, as well as for patients.

During the Third Year the student is expected to do extensive supplementary reading, and will be required to write one or more essays on subjects assigned by the department.

Students are expected to be ready to enter the infirmary to practise on patients at the end of the Third Year, but before doing so must pass an oral examination on the subject of dental practice.

#### FOURTH YEAR

The course in Operative Dentistry in this year covers a complete review of the subject in lectures, demonstrations, laboratory technique and procedures in practice. During the early weeks of the term a review course

is given to acquaint the student with the finer points in detail and how to handle patients in practice. Clinics are important features of the instruction given. Each student is required to do a number of specimen operations and prepare an essay on some dental subject chosen by the department.

The lecture course follows the routine order of a dental practice, reception and examination of patients, diagnosis, symptoms and treatment of the common diseases, deformities and affections of the mouth and teeth. General discussions of oral hygiene, prophylaxis, order of operations and selection of filling materials are made introductory to the preparation of cavities for fillings and inlays. The treatment of hypersensitive dentine is given very special attention. Then follows a detailed discussion of filling materials, their manipulation, insertion and finishing. These procedures are illustrated with large plaster of Paris teeth and large steel instruments. The latter part of the course covers in review asepsis in operating, preservation of the dental pulp, pulp devitalization, root treatment and filling. The lecture course in this year is built on the foundations laid in the technical procedures taught in the previous year.

#### FIFTH YEAR

The course in Operative Dentistry in the Fifth Year is aimed to cover in general the whole subject, and in minute particular such matters as can not be clearly understood without clinical experience. In this year special technical procedures are taught by demonstration, clinic and lecture. Special courses of reading are prescribed covering in some cases minute details, and in others general theories and practice. Specimen technique pieces are set for those requiring such help. At least one thesis and one address or presentation of a patient for diagnosis are required of each candidate.

The lecture course follows the demands of the requirement of the students. A subject which has been well covered in a previous year may get but slight attention, while another subject which received little attention before will be well covered in this course. Special attention is given to the more recently introduced theories and methods of practice. The first three or four lectures cover a review of reception and examination of patients, arrangement and caring for instruments, sterilization and asepsis. The first few lectures cover a review of children's dentistry and a review of the reception and examination of patients with special reference to instruments, sterilization and asepsis, and caring for patients suffering from accidents and acute infection. A special course of lectures is given in porcelain work as applied to dentistry. The lectures in radiography cover a discussion of the principles and practice of making radiographic pictures and their interpretation. Then follows a rather sequential course covering eruption, calcification, decalcification and arrangement of the teeth, diseases of dentition, deformities, defects and irregularities and

atrophy of the teeth. Next follows diseases of the dental pulp covering in detail the causes, symptoms, diagnosis, treatment and prognosis of pulpitis, degenerative changes, pulp devitalization, extirpation of pulps, root canal fillings, gangrene, acute and chronic periodontitis and systemic diseases said to be associated with tooth infections. Oral sepsis and the local diseases associated with it are presented in lectures and clinics. The chief purpose in this, the final year, is to have each student see and come into close contact with as many patients as possible who are suffering from dental diseases and their consequences, and, above all, to develop the power to come to correct conclusions based upon correct observations.

### ORTHODONTIA

*Professor:* GUY G. HUME, D.D.S.

*Associates:* C. A. CORRIGAN, D.D.S.; C. A. KENNEDY, D.D.S.

#### THIRD YEAR

In the lectures to the Third Year is given in detail the taking of impressions and making models for orthodontia purposes, normal occlusion and malocclusion, with the forces governing each, the physiology and mechanics of tooth movement, the effect upon occlusion of the presence of adenoids, enlarged tonsils, and habits, the effect of malocclusion upon mastication and facial symmetry, the etiology, diagnosis, and classification of malocclusion.

Appliances are studied in general, and those for the correction of simple cases in detail. Models of the different types of malocclusion will be presented on the screen, with pictures showing the characteristic facial symmetry resulting from each type. The treatment and retention of simple cases are discussed.

#### FOURTH YEAR

Lectures are given reviewing the treatment of cases.

In the Infirmary the students treat simple cases under the direction of the professor and his assistants.

### PERIODONTOLOGY

*Professor:* HAROLD K. BOX, D.D.S., PH.D.

*Associate Professors:* W. G. TRELFORD, D.D.S.; C. A. SNELL, D.D.S.

*Laboratory Assistant:* FRED THIBAUT

#### FOURTH AND FIFTH YEARS

Periodontology is that branch of dental science which deals with the diseases of the periodontal tissues. Due to the revelations of modern research regarding the influence of periodontal infection in the inauguration of systemic disease, a knowledge of its principles is of paramount importance



to the practitioner of dentistry. Owing to the numerous points of contact that periodontology makes with general dentistry, it follows that its principles are fundamental to dentistry as a whole and that dental operations can be correctly performed only by one possessing a thorough working knowledge of periodontal science.

The subject is taught both didactically, and in laboratory and infirmary, during the Fourth and Fifth Years. A series of ten lectures is given in each year, and, following demonstrations, each student is required to carry to successful conclusion the treatment of actual cases in practice. In addition to the regular clinical instruction, special clinics will be given during the Fifth Year on some of the more advanced phases of the subject.

#### PHARMACY AND PHARMACOLOGY: MATERIA MEDICA

*Professor:* V. E. HENDERSON, M.A., M.B.

*Assistant Professor:* G. H. W. LUCAS, M.A., PH.D.

*Fellow:* H. I. M. SPARKS

A course of lectures, accompanied by laboratory work which will serve to amplify and illustrate the lectures, will be given in the Third Year. The subject matter of the course will deal chiefly with those drugs which the student of Dentistry has occasion to use, though other drugs will be used in order to draw attention to pharmacological principles and to illustrate them. The chief object of the course will be to inculcate in the student accurate habits of thought in regard to the pharmacological substances that he will employ, and to enable him to absorb and understand new conceptions as they are brought to his attention by the developments of science. In the laboratory work a great deal of attention will be directed to the accuracy of the use of language in describing observations and drawing conclusions from them.

In view of the importance of the local and general anaesthetics, particular attention will be paid to them both from the standpoint of their anaesthetic value and their toxicity so that the student should become familiar with the principles underlying their use, and also certain of the most usually employed drugs themselves.

#### PHYSICS

*Professor and Director of the Physical Laboratory:* J. C. McLENNAN, PH.D., LL.D., D.Sc., F.R.S.

*Professors:* E. F. BURTON, PH.D.; JOHN SATTERLY, D.Sc.

*Associate Professors:* LACHELAN GILCHRIST, PH.D.; H. A. McTAGGART, PH.D.

*Demonstrators:* COLIN BARNES, M.Sc.; MISS K. M. CROSSLEY, B.A.; M. J. LIGGETT, B.A.; H. G. SMITH, PH.D.

*Assistant Demonstrators:* MISS E. G. ALLIN, B.A.; MISS M. C. M. McDONALD, B.A.; W. J. P. MILLS, B.A.; N. S. TAYLOR, M.Sc.; MISS M. E. WESTMAN, B.A.

The work of instruction in Physics consists of a series of lectures and a course in practical work in the laboratories.

#### FIRST YEAR

*Lectures.*—The lectures on Physics will not only give a concise outline of the subject, but are intended to form a satisfactory foundation for future study in other branches of science.

A course of twenty-five lectures on Practical Mathematics and Mechanics will be given during the year. These lectures, which will be illustrated by many problems, will deal in a systematic way with mechanics, use of curves, logarithms, etc.

There will be four lectures on Physics per week during the year of which two lectures bear directly on the practical work assigned to the student while the other two lectures are part of a course dealing more particularly with the principles of Physics of special use to students of Dentistry. The following is an outline of the work covered:

#### 1. APPLIED MATHEMATICS AND CALCULATIONS. THEORY OF MEASUREMENTS.

Calculations of experimental results to show limits of accuracy; contracted methods: logarithms. Trigonometrical ratios defined; reading of tables of sines, cosines and tangents. Graphical methods. (A convenient reference book is Tuttle and Satterly: *Theory of Measurements*: Longmans, Green & Co.)

#### 2. MECHANICS.

Measuring instruments, length, volume; verniers, micrometers. Forces: conditions of equilibrium; resolution of forces, moments; centre of gravity; levers and simple machines; centrifugal force. Velocity; acceleration, momentum, force, work and power. Energy, kinetic and potential; transmutation of energy; law of conservation of energy.

#### 3. HYDROSTATICS AND HYDROMECHANICS.

Laws of pressure in fluids at rest; Pascal's Law and Archimedes' principle; specific gravity; the hydrostatic paradox; resultant vertical forces on walls, manometers, barometers, mercury and aneroid; Bramah's press; pumps. Archimedes' principle in air; weight of atmosphere. Laws of pressure in fluids in motion; Bernoulli's principle; applications such as atomizer, Bunsen burner, filter pump; action of air in winds and curving of balls in flight.

#### 4. PROPERTIES OF MATTER.

Principles of the kinetic theory of matter; structure of solids, liquids and gases; diffusion; molecules and molecular forces. Viscosity of fluids; velocity gradient; coefficient of viscosity; Poiseuille's law for tubes; experimental determination of coefficient; Ostwald viscosimeter; viscosity

and temperature; relation to blood flow; capillaries. Surface tension; experimental illustrations. Laws of gases; theoretical determination of pressure,  $p=1/3 mn\bar{V}^2$ ; Boyle's Law; Charles' Law; laws of diffusion. Change of state; solid to liquid, liquid to gas. Colloidal solutions; size of particles; physical properties; mobility; coagulation by electrolytes; Brownian movement and its molecular explanation; dialysis; osmotic pressure; relation to body fluids and membranes.

#### 5. HEAT.

Expansion of solids, liquids and gases; thermometers; Centigrade and Fahrenheit scales; absolute scale; maximum and minimum thermometers; clinical thermometer. Capacity for heat; calorie; specific heats; latent heat of vaporization and fusion; calorimetry. Heat as energy; mechanical equivalent of heat; Joule's law. Vapour pressure; various forms of hygrometers. Radiation; laws of cooling.

#### 6. ACOUSTICS.

Production, propagation and recording of sounds; characteristics of a note, pitch, intensity and quality; definition of wave length; determination of velocity;  $V=n\lambda$ ; resonance; stationary waves; organ pipes; laws of strings; membranes; voice production, structure of ear; interference of sound waves; beats and beat tones; absorption and reflection of sound; musical scales.

#### 7. ELECTRICITY AND MAGNETISM.

The fundamental phenomena associated with electrified bodies and the laws of the action of electrical charges. The methods of measurement of electrical charge, current, potential, capacity, resistance, conductance and the definition of the units of these quantities in the electrostatic, practical and electromagnetic systems. The construction and action of the instruments used in measuring electrical quantities. The properties and laws of action of magnets and of the magnetic fields associated with a circuit bearing a current. The method of production, the properties and the measurement of induced currents of varying frequencies and their application. The discharge of electricity through gases, and the factors upon which their conductivity depends, the properties and uses of anode, cathode and X-rays. The methods of investigating and identifying radioactive substances. The properties of radioactive radiations and their uses.

#### 8. LIGHT.

The electron as a source of light waves—nature of the waves—their velocity in free space, water and glass—their reception by the eye. Analogies in sound and wireless signalling. Reflection of waves from plane and spherical mirrors. Refraction of waves at surfaces—index of refraction—the critical angle—methods of finding the index. The eye; optical instruments; colour; spectroscopy; polarised light; interference.

**9. PRACTICAL WORK.**

The Practical Work, consisting of a laboratory course of four hours each week designed to illustrate the principles dealt with in the lectures, will be conducted under the supervision of the Director of the Laboratory.

*Text-books:* Merchant and Chant, "Mechanics for the Upper School" (Copp Clark); Stewart and Satterly, "Senior Heat" (Univ. Tutorial Press); Duncan and Starling, "Light and Sound" (Macmillan & Co.); S. G. Starling, "Elementary Electricity" (Longmans, Green & Co.) Clark's Tables.

**PHYSIOLOGY**

*Professor:* J. J. R. MACLEOD, M.B., D.Sc., LL.D., F.R.S.

*Associate Professor:* N. B. TAYLOR, M.B.

**SECOND YEAR**

A short introductory course of lectures which covers the main divisions of the subject in an elementary fashion is given to the student towards the end of his second year. This enables him to obtain a perspective view of physiological study and prepares him for the more advanced course which he receives in the following year.

**THIRD YEAR**

A course of thirty-five lectures is given to the students of the Third Year. The first twenty lectures are concerned with the physiology of respiration and the circulation and are given in the Michaelmas term. The remaining twenty lectures, given in the Easter term, are devoted to the physiology of digestion and secretion, metabolism, the ductless glands, the cranial nerves and special senses, and are planned with the view of enabling these divisions of the subject of physiology to be treated in a manner more particularly adapted to the requirements of the dental student. Special attention is paid, where possible, to the application of physiological principles to dental science.

***Practical Physiology***

A practical course in physiology is given, consisting of three hours of laboratory work twice a week for ten weeks (a total of sixty hours). The course comprises some twenty experiments performed by the students and designed to illustrate the more important principles of the physiology of the circulation and special senses. The student is required to write a record of his work in his note-book each day, noting therein the object of the experiment, the principles which it illustrates and the results which he has obtained. Note-books are examined for the purpose of grading at short intervals, and the students are subjected by the instructor to short quizzes from time to time throughout the course. A practical examination

is given at the end of the laboratory course. In grading the candidates in this examination particular attention is paid to the candidates' technique in performing the experiment.

The student will be required to make good all loss or breakage of the apparatus assigned to him at the commencement of the course.

### PREVENTIVE DENTISTRY

*Professor:* WALLACE SECCOMBE, D.D.S.

*Associate:* M. A. COX, M.B.

*Research Assistant:* MISS EDITH F. TRENT, B.A.

In this department the attention of the student is focussed upon the application of preventive measures to the practice of dentistry, personal habits of oral cleanliness, and the responsibilities of the individual dentist and of the dental profession toward oral hygiene undertakings and their relation to public health.

The course includes both didactic and clinical instruction. In the pre-clinical years the history and present status of the prevention of disease is covered along with instructions in the personal care of the oral cavity. The subjects of mastication, etiology of dental diseases, susceptible and immune dental areas and physiological balance are also presented in the earlier years of the course.

Examinations of dental conditions of members of the first year class are made and advice given.

In the clinical years the didactic course bears direct relationship to the laboratory and clinical instruction including case Histories, Diet Charts, Food Tables, Balanced Diet, Development Factors, Saliva, Osmosis, Hygienic Care of the Teeth and private and public education of the public in relation to dental health.

Research problems are discussed and the interest of the fifth year students is aroused in the unknown, as well as the known, phases of the subject.

### PROSTHETIC DENTISTRY

*Professor:* W. E. CUMMER, D.D.S.

*Professor of Crown and Bridge Prosthesis:* I. H. ANTE, D.D.S.

*Associate Professor:* W. E. WILLMOTT, D.D.S.

*Demonstrators:* R. J. GODFREY, D.D.S.; H. H. HALLORAN, D.D.S.

#### SECOND YEAR

Lectures—The subject is introduced by definitions and a reference to its relation to dental science, followed first by a survey of the structure and function in complete natural dentures, and second, the causes and effect of the edentulous or the semi-edentulous state, in each case as

concerned in Prosthetic Dentistry. The technology of the more important prosthetic materials is considered, followed by an analysis of the more important types of artificial restorations and their component parts.

The subject of Crown and Bridge Prosthesis is begun in this year by a study of the various root preparations, and of the simpler forms of crown and bridge work.

Laboratory—A series of exercises, which are planned to familiarize the student with all of the phases of Prosthetic Dentistry which may be taught outside the mouth, are partially completed in this year.

#### THIRD YEAR

Lectures—The course follows the work of the Second Year by a consideration of the principles of examination of the edentulous mouth. A standard schedule of sittings and intervals in typical Full Upper and Lower, also Full Upper or Lower against natural teeth here follows, based on the use of the Snow apparatus. The principles of impression making and of occlusion are given special consideration.

In Crown and Bridge Prosthesis a study of advanced root preparations is followed by classification of bridge work, indications and application of the different forms of abutment pieces and pontics, advantages and disadvantages of all forms of bridge work, the best methods of removing crowns and bridges, also the repairing of same and the important work of finishing, inserting and keeping in good repair.

Laboratory—The Laboratory course, begun in the Second Year, is carried to completion in this year.

#### FOURTH YEAR

Lectures—The course opens with an advanced study of the restoration of the edentulous mouth with special reference to esthetics. This is followed by a consideration of the care of the semi-edentulous mouth, and of the standard parts used in partial denture service, and a consideration of design in partial denture service. Partial denture classification, and the subsequent phases of construction, including occlusion, insertion and maintenance are here considered.

The lecture course in Crown and Bridge Prosthesis deals chiefly with fundamentals and construction, and includes the many variations from the standard principles taught in the preceding year, the results that may be expected of operations in this field and the dangers to be guarded against.

Practical Work—At this stage the student deals with the actual patient, and the practical work consists of restorations in the Dental Infirmary.

#### FIFTH YEAR

Lectures—These lectures are devoted entirely to practice and include advanced studies in abnormal conditions in partial and full denture work, and in crown and bridge prosthesis. A study of surgical prosthesis

is followed by a survey of advanced methods of occlusion applied to all branches of prosthesis and include Gysi, Hanau, and other systems.

Special clinics are given to small groups of students on the more difficult and exacting forms of work and new developments, and the different ways of technical procedure are demonstrated.

Students are required to write essays on different aspects of the subject, and are also called upon to choose and prepare designs for a large number of hypothetical cases.

Practical Work—All practical work is done for patients in the Dental Infirmary.

## PUBLIC SPEAKING

*Instructor:* R. S. HOSKING, B.A., B.D.

### FOURTH YEAR

A short course of lectures on fundamental principles of Public Speaking, followed by group work in the practical application of these principles to different phases of public address.

## RELATION OF SCIENCE TO CIVILIZATION

### FIRST YEAR

The greater part of the assigned time of 60 hours will be devoted to a course of lectures designed to illustrate the influence which scientific thought and achievement have had on the development of modern civilization. The lectures will be given jointly by several lecturers, but the course as a whole will be under the general direction of Professor Wasteney.

NOTE.—These lectures are taken with the first year medical students.

## SURGERY

*Professor:* CLARENCE L. STARR, M.B., M.D., LL.D.

*Assistant Professor of Surgery:* E. S. RYERSON, M.D., C.M.

*Associate Professor of Oral Surgery:* F. E. RISDON, D.D.S., M.B.

### FIRST YEAR

#### *First Aid*

A course of five lectures is given in this year, including the following subjects: principles of First Aid, fractures, dislocations and sprains, wounds, haemorrhages, burns, frost-bites, foreign bodies in eye, ear and throat, insensibility and poisoning, artificial respiration.

### FOURTH YEAR

#### *General Surgery*

An introduction to the general principles of Surgery is given in a course of fifteen lectures to the Fourth Year on the following subjects: inflamma-

tion; abscess and suppuration; ulceration; gangrene; wounds; sepsis and infection; haemorrhage and shock; tuberculosis; syphilis. Fifteen clinics are held in the Toronto General Hospital on cases, illustrating the above conditions as they appear in patients. The methods used for their diagnosis and the principles of the treatment applied are also demonstrated.

#### FIFTH YEAR

##### *General Surgery*

A course of fifteen lectures is delivered to the Fifth Year on the following general surgical conditions: tumours; fractures; injuries and diseases of bone; hare-lip and cleft palate; diseases of mouth, tongue, pharynx, lymph glands and salivary glands; tumours of the neck; empyema and lung abscess; diseases of the alimentary tract secondary to mouth infections; diseases of articular system secondary to mouth infections. Clinical cases in the Toronto General Hospital are shown of the above types in a course of fifteen clinical demonstrations.

##### *Oral Surgery*

A further course of fifteen lectures and fifteen clinics is devoted to a more specific discussion of disease conditions of the mouth, gums, face and sinuses, with particular reference to their pathology, diagnosis and treatment. The anatomy of this region is reviewed and technique of operative procedure demonstrated. Inflammatory conditions of the jaws, haemorrhage, injuries including fractures and neoplasms are included in the lectures and clinics. The lectures are given at the Dental Building and the clinics at the Toronto General Hospital.



## COMPULSORY TEXT-BOOKS

## FIRST YEAR

English—*Return of the Native*, HARDY; *Typhoon and Other Stories*, CONRAD; *Ethan Frome*, WHARTON; *Arms and the Man*, SHAW; *Strife*, GALSWORTHY; *Anthology of Modern Verse*, METHUEN.

Biology and Comparative Dental Anatomy—*Manual of Zoology*. BORRADAILE (latest edition); *Anatomy of the Rabbit*, BENSLEY (latest edition); *Comparative Dental Anatomy*, DEWEY and THOMPSON.

Chemistry—*General Chemistry*, McPHERSON and HENDERSON, latest edition; *A Smaller Chemical Analysis*, NEWTH, latest edition.

Physics—*Clark's Mathematical Tables*; *Mechanics for the Upper School*, MERCHANT and CHANT; *Senior Heat*, STEWART and SATTERLY; *Light and Sound*, DUNCAN and STARLING; *Elementary Electricity*, S. G. STARLING.

Psychology—*A Study of Mental Life*, ROBERT S. WOODWORTH.

Ethics—*Introduction to Ethics*, JOHNSON.

Dictionary—*Standard Dental Dictionary*, OTTOFY (latest edition).

Bulletin—*Technology No. 1*.

Blue prints, 11 x 8½, punched for students' official note-book, for Dental Technology projects 2, 6, 8, 19 and 22.

Students' Official Note-book—Loose-leaf, 10 sheets squared mm. paper, 11 x 8½.

## SECOND YEAR

Chemistry—*Organic Chemistry*, NORRIS, latest edition  
Histology—BAILEY; *A Textbook of Dental Histology and Embryology*, NOYES.

Anatomy—GRAY, American edition; *Manual of Anatomy*, Vol. III, CUNNINGHAM.

Mineralogy—*Handbook of Mineralogy*, FOYE.

Dental Anatomy—BLACK.

Prosthetic Dentistry—WILSON.

Crown and Bridge Prosthesis—EVANS.

Operative Dentistry—CLYDE DAVIS.

Dictionary—*Standard Dental Dictionary*, OTTOFY (latest edition).

Bulletins—Prosthetic. Nos. 24, 27, 34-2, 15, 1-3, 12, 4; Operative, Nos. 1, 2, 6, 11, 14; Chemistry; Principles of Selection and Articulation, Dentists' Supply Co., New York.

Determination of Minerals (Form 104), 12 sheets.

Students' Official Note-book—Loose-leaf.

*The following book secured in First Year will also be used.*

Chemistry—*General Chemistry*, McPHERSON and HENDERSON, latest edition.

## THIRD YEAR

- Bacteriology—JORDAN.  
 Materia Medica and Therapeutics—PRINZ.  
 Anaesthesia—*Conduction, Infiltration and General Anaesthesia*, NEVIN and PUTERBAUGH.  
 Surgery—*Principles and Technique of Oral Surgery*, BERGER.  
 Dental Pathology—*Dental Pathology and Therapeutics*, Burchard and Inglis (latest edition).  
 Metallurgy—*Practical Dental Metallurgy*, HODGEN, latest edition.  
 Orthodontia—DEWEY.  
 Physiology—*Laboratory Manual of Physiology*, MACLEOD; *Essentials of Physiology*, BAINBRIDGE and MENZIES.  
 Pharmacology—*Lectures in Pharmacology for Dental Students*, HENDERSON.  
 Dictionary—*Standard Dental Dictionary*, OTTOFY (latest edition).  
 Bulletins—Prosthetic, No. 9; Operative, Nos. 4, 5, 10, 13, 15, 16.  
 Notebook for Metallurgy.  
 Pharmacology Note-book.  
 1 No. 496 Notebook.  
 1 grease pencil, red.  
 15 Laboratory Record Sheets.  
 15 Synopsis of Infection Sheets.  
 Students' Official Note-book—Loose-leaf.  
*The following books secured in earlier years will also be used:*  
 Chemistry—*Organic Chemistry*, NORRIS, latest edition.  
 Operative Dentistry—CLYDE DAVIS.  
 Prosthetic Dentistry—WILSON.  
 Crown and Bridge Prosthesis—EVANS.  
 Bulletins—Prosthetic, Nos. 24, 27, 34-2, 15, 1-3, 12, 4.  
 Operative, Nos. 1, 2, 6, 11, 14.

## FOURTH YEAR

- General Pathology—DELAFIELD and PRUDDEN.  
 Operative Dentistry—JOHNSON.  
 Dental Pathology and Periodontia—*C.D.R.F. Bulletins*, Nos. 3, 4, 7.  
 Surgery—*Principles and Technique of Oral Surgery*, BERGER.  
 Dictionary—*Standard Dental Dictionary*, OTTOFY (latest edition).  
 Bulletins—Prosthetic Nos. 22, 23, 35, Quint, 25, 10, 11, 5, 3, 2, 31, 21, 14 (16, 17, 6 copies of each), (13, 2 copies); Crown and Bridge No. 1; Orthodontia Nos. 1, 2, *C.D.R.F. Bulletins*, Nos. 6 and 8; Operative, Nos. 3, 8, 12, 16.

- Charts: 1 Local Anaesthesia, 1 General Anaesthesia, 1 Calcium Table,  
 1 Table of Food, 1 Daily Diet.  
 15 Laboratory Record Sheets.  
 15 Synopsis of Infection Sheets.  
     1 grease pencil, red.  
     1 No. 496 Notebook, 9 x 7½.  
 Students' Official Note-book—Loose-leaf.  
*The following books secured in earlier years will also be used:*  
 Bacteriology—JORDAN.  
 Prosthetic Dentistry—WILSON.  
 Operative Dentistry—CLYDE DAVIS.  
 Bulletins—Prosthetic, Nos. 24, 27, 34-2, 15, 1-3, 12, 4, 9, 35.  
     Operative, Nos. 1, 2, 6, 11, 14.

#### FIFTH YEAR

- Medicine—HUGHES.  
 Dictionary—*Standard Dental Dictionary*, OTTOFFY (latest edition).  
 Daily Diet Chart.  
 Bulletins—Operative No. 16; Orthodontia Nos. 1, 2.  
 Students' Official Note-book—Loose-leaf.  
*The following books secured in earlier years will also be used:*  
 Jurisprudence—BROTHERS.  
 Dental Pathology and Periodontia—C.D.R.F. *Bulletins*, Nos. 3, 4, 7.  
 Orthodontia—DEWEY.  
 Prosthetic Dentistry—WILSON.  
 Bulletins—Prosthetic, Nos. 24, 27, 34-2, 15, 1-3, 12, 4, 9, 22, 23, 35;  
 Quint, 25, 10, 11, 5, 3, 2, 31, 14; C.D.R.F. *Bulletins*, Nos. 6 and 8; Crown  
 and Bridge, No. 1; Operative, Nos. 1, 2, 6, 11, 14, 5, 10, 13, 15, 3, 8, 12.

## SUPPLEMENTARY TEXT-BOOKS

Anaesthesia—*Exodontia*, WINTER, LEDERER, CAHN; *Local Anaesthesia*, SMITH, FISCHER, NEVIN; *General Anaesthesia*, HEWITT, GWATHNEY, DEFORD, LUKE, BARBER, LABAT.

Anatomy—*Atlases*, SOBOTTA McMURRICH, SPALTRHOLZ; *Text-books*, MORRIS, PIERSON, CUNNINGHAM'S *Text-book*; *Handbooks*, YOUNG, JAMIESON.

Applied Chemistry—*Chemistry of Dental Materials*, C. S. GIBSON.

Biology, including Comparative Dental Anatomy—*Principles of Animal Biology*, SHULL; *Applied Biology*, BIGELOW; *Microbiology*, MARSHALL; *Comparative Anatomy*, KINGSLEY; *History of the Human Body*, WILDER.

Biochemistry—*Physiological Chemistry*, MATTHEWS; *Principles of Biochemistry*, ROBERTSON; *Fundamentals of Biochemistry*, PARSONS; *Physiological Chemistry*, PETTIBONE; *Practical Physiological Chemistry*, HAWK; *Laboratory Manual of Physiological Chemistry*, ROCKWOOD; *Practical Physiological Chemistry*, COLE; *Applied Biochemistry*, MORSE.

Bacteriology—GOADY, BURCHARD, FORD.

Crown and Bridge Prosthesis—PEERSO, GOSLER, HOVESTAD.

Chemistry—*Modern Inorganic Chemistry*, MELLOR; *Practical Organic and Biochemistry*, PLIMMER;

Dental Economics—*Success in Dental Practice*, JOHNSON, CLAPP.

Dental History—GUERINI.

Dental Anatomy—DEWEY; BROOMELL; HOPEWELL-SMITH; MUMMERY.

Dental Radiography—RAFER; MCCOY; THOMA; *Dental Infections, Oral and Systemic*, PRICE, ENFIELD, BRAASH.

Disease of the Gums—GOADBY.

Dictionaries—STEDMAN; APPLETON; GOULD; DORLAND.

Diet—THOMA; MCCOLLUM.

Ethics—SETH; MUIRHEAD; KELLS.

Electro-Therapeutics—STURRIDGE; IVY.

General Pathology—ADAMI and MCCRAE; WIDDOWSON; *Report on Odontomes* by GABELL, JAMES, PAYNE, MOOREHEAD and DEWEY.

Histology—NOYES; HOPEWELL-SMITH; BOHM, DAVIDOFF and HUBER; JORDAN and FERGUSON.

Jurisprudence—MIKEL; NOYES, second edition; REHFUSS.

Metallurgy—*Dental Metallurgy*, HEPBURN; *Materials and Machines*, SMITH; *Elements of Metallography*, RUER; *Introduction to study of Metallurgy*, ROBERTS-AUSTEN; *Alloys and their Industrial Application*, LAW; *Chemical Microscopy*, CHAMOT.

Medicine—OSLER; WHEELER and JACK; CECIL; *Collected Papers of the Mayo Clinic*.

Mineralogy—KRAUSS and HUNT (Publisher, McGraw-Hill).

Materia Medica, Pharmacology—LONG; *Pharmacology*, GOTTLIEB and MEYER (trans. HENDERSON); *British Pharmacopoeia*; *United States Pharmacopoeia*.

Operative Dentistry—BLACK; MARSHALL; WARD; MOORHEAD; *Dental Surgery*, BENNETT.

Orthodontia—PULLEN; LISCHER; ANGLE; TALBOT.

Prosthetic Dentistry—*American Text-book of Prosthetic Dentistry*, TURNER, latest edition; *Prosthetic Dentistry*, PROTHERO; *Prosthetic Dentistry*, GABELL; *The Art of Prosthetic Dentistry*, GOODHUGH; *Full Dentures*, CAMPBELL; *Full Dentures*, NELSON; *Partial Dentures*, KENNEDY; *Handbuch der Zahnheilkunde, Dritter Band, 1926*, BRUHN, J. F. Bergmann, Munich.

Physiology—BAINBRIDGE and MENZIES; *Essentials of Human Physiology*, HALIBURTON; HOWELL.

Preventive Dentistry—PICKERILL; SIM WALLACE; MARSHALL; ADAIR.

Special Dental Pathology—BURCHARD and INGLIS; ENDELMAN-WAGNER; STILLMAN and MCCAUL.

Surgery, General—ROSE and CARLESS; GASK and WILSON; DaCOSTA; THOMSON and MILES. Vol. 1; *Choyce's System*, Vol. 1; HEY GROVES; *Oral Surgery*—BLAIR and IVY; BERGER; GOADBY; *Dictionary*, GOULD.

Therapeutics—GORGAS; BURCHARD and INGLIS; COLEMAN; GORPP; REHFUSS.

## SCHOLARSHIPS

## THE UNIVERSITY OF TORONTO WAR MEMORIAL SCHOLARSHIP

Two Scholarships, one to be called the No. 4 Canadian General Hospital Scholarship, each of the value of \$250, have been established by the Alumni Federation of the University from the War Memorial Fund to be awarded to students in the Faculty of Dentistry.

The general basis on which the above scholarship may be awarded shall be as follows:

- (a) Standing in course of studies.
  - (b) Need of assistance.
  - (c) Merit, as shown in extra-academic activities—executive, literary,
- 
- (d) Relationship, if any, to active service during the War.

Information regarding these scholarships may be obtained from the Secretary-Treasurer of the Alumni Federation, Room 225, Simcoe Hall, to whom applications for the same must be made not later than February 15th.

## THE KHAKE UNIVERSITY AND Y.M.C.A. MEMORIAL SCHOLARSHIP FUND

The Khaki University and Y.M.C.A. Memorial Scholarship Fund was established by the Khaki University Committee. At the present time this fund is being used to make loans to returned-soldier students of the higher years. Applications for such loans should be made to the President of the University.

## THE S. UBUKATA FUND

The S. Ubukata Fund of \$10,000, the gift of Mr. S. Ubukata, provides for the establishment of prizes, medals, scholarships and loans for which Japanese students of all faculties and colleges may be eligible. Information regarding the conditions of award may be obtained from the Registrar of the University.

## THE F. W. JARVIS BURSARIES

Two Bursaries, known as "The F. W. Jarvis Bursaries", of the value of \$50 each, the gift of A. H. Jarvis, Esq., of Ottawa, brother of F. W. Jarvis, to be awarded under the following conditions:

1. These Bursaries are open only to former students of Ottawa Collegiate Institute (Lisgar Street), who, without some such assistance, may not be able to carry on their academic courses.

2. They may be awarded at Matriculation or in any year of an undergraduate course in any Faculty of the University.
3. They shall be awarded preferably one to a man and the other to a woman student; but if in any year students of opposite sexes do not apply, both Bursaries may be awarded to men or to women.
4. A Bursary may be held in successive years by the same student and also in conjunction with any scholarship awarded by the University or the federated colleges.
5. The Bursaries shall be awarded by the Senate of the University on the recommendation of a Committee of Award consisting of the President of the University, the Principal of Ottawa Collegiate Institute and the donor; candidates shall make application for the same not later than May 15th on the special form to be obtained from the Registrar.

## DEGREE OF BACHELOR OF SCIENCE IN DENTISTRY

The degree of Bachelor of Science in Dentistry has been added to the curriculum in Dentistry to encourage scholarship and research in the introductory dental and medical sciences, and in the sciences immediately accessory to dentistry.

The degree is available to two classes of candidates, namely: (a) *undergraduates* of the five-year course who have reached the end of the third or subsequent year, and who have completed an additional year's work outside the regular dental curriculum on the basis of an instructional schedule and research; and (b) *graduates* who have completed an additional year's work consisting chiefly of research in some one introductory or clinical department of the Faculty of Dentistry.

The regulations governing this degree are as follows:

1. That an undergraduate eligible for registration for the degree must have completed at least three years of the five-year course of the Faculty of Dentistry of the University or must possess equivalent qualifications;
2. That a graduate of the Faculty of Dentistry of this University who has completed the five-year course, or a graduate who possesses equivalent qualifications, may proceed to this degree. In appraising credentials of graduates of a dental course of less than five years, either taken in this University or elsewhere, time spent in the ethical practice of Dentistry or its equivalent, may be considered in lieu of attendance at a recognized department of Dentistry;
3. That the course leading to the degree shall include one major and one minor subject, and shall require one year, in addition to the regular five-year dental course or its equivalent, in some primary or clinical laboratory of the University of Toronto. In addition, each candidate shall be required to submit a thesis embodying the results of his studies and to give evidence that he has a reading knowledge of either French or German,
4. That in each case the subjects selected for the thesis and for the major and minor studies must be approved by the Faculty of Dentistry, and each candidate, before being granted the degree, must pass examinations upon his thesis, and upon both his major and minor subjects, such examinations to be conducted by the Faculty of Dentistry or by a committee appointed for the purpose by this Faculty.



## FEES

## Bachelor of Science in Dentistry:

Course.....	\$25
Examination.....	10
Degree.....	10
	<hr/>
	\$45

Membership in Hart House optional.

## DEGREE OF MASTER OF SCIENCE IN DENTISTRY

A candidate eligible for registration for this degree must be a graduate of the regular undergraduate course of the Faculty of Dentistry of the University of Toronto or must possess equivalent qualifications.

The regulations governing the degree are as follows:

1. That the course leading to the degree shall include one major and one minor subject, and shall require at least two years of post-graduate study in some primary or clinical laboratory of the University of Toronto. In addition, each candidate shall be required to submit a thesis embodying the results of his studies and to give evidence that he has a reading knowledge of either French or German;
2. That a graduate in Dentistry who has been granted the degree of Bachelor of Science in Dentistry, or its equivalent, may be granted credit of one year of post-graduate study toward the degree of Master of Science in Dentistry;
3. That in each case the subjects selected for the thesis and for the major and minor studies must be approved by the sub-committee of the Graduate School which administers the regulations governing the degree, and each candidate, before being granted the degree, must pass examinations upon his thesis, and upon both his major and minor subjects, such examinations to be conducted by the staffs of the departments concerned.

## FEES

## Master of Science in Dentistry:

Registration and tuition, first year.....	\$25
Each subsequent year.....	5
Examination.....	10
Degree.....	10

Fees payable to the Bursar, University of Toronto. Membership in Hart House optional.

## ANNUAL COURSE FOR DENTAL PRACTITIONERS

The Annual Course for Dental Practitioners is to be held this year for one week, commencing Monday the 12th September. This is the week immediately following the Canadian National Exhibition, which will be held from August 27th to September 10th.

The Dental Practitioners' Course is designed to meet the need of general practitioners who may desire to refresh their knowledge and become more familiar with the advances of recent years in important branches of dentistry.

## GENERAL SESSIONS

All registrants are expected to attend the general sessions comprising 20 lectures as follows:

Clinical Dentistry and Diagnosis . . . . .	2 lectures
Dental Surgery and Anaesthesia . . . . .	5 "
Preventive Dentistry . . . . .	5 "
Orthodontia for the General Practitioner . . . . .	2 "
Dental Praxis . . . . .	3 "
Periodontia . . . . .	3 "

## GROUP SESSIONS

The class will be divided into groups for laboratory work, demonstrations and clinical practice as follows:

*Group 1—Periodontia—* 7 morning hours

10 afternoon hours

(Members of this group will devote both morning and afternoon periods to Periodontia and will have no choice of other groups.)

## MORNINGS ONLY—7 HOURS EACH GROUP

<i>Group 2—Operative Dentistry</i>	} Registrant may select only one of these groups.
" 3— <i>Dental Surgery and Anaesthesia</i>	
" 4— <i>Full Denture Prosthesis</i>	

## AFTERNOONS ONLY—10 HOURS EACH GROUP

<i>Group 5—Orthodontia for the General Practitioner</i>	} Registrant may select only one of these groups.
" 6— <i>Dental Surgery and Anaesthesia</i>	
" 7— <i>Crown and Bridge and Partial Denture Prosthesis</i>	

A brief outline of the work to be covered follows:

*Crown and Bridge and Partial Denture Prosthesis*

DRS. W. E. CUMMER and I. H. ANTE

This course will cover: causes for loss of teeth, choice of bridge work, reasons for failures, physiological essentials, surgical and technical diagnoses, principles and design for bridges, insertion, maintenance and repair, inlays, crowns and pontics and casting.

Following a brief reference to the Science of Partial Denture Service, the methods of practice, as demonstrated, will include design, construction (including impressions and anatomical articulation), installation, and maintenance and repair.

*Dental Surgery and Anaesthesia*

DRS. E. W. PAUL, W. B. AMY and F. S. JARMAN

Lectures on the subject of Anaesthesia (local and general) and Dental Surgery will be given, with numerous clinics where actual operations will be performed.

*Full Denture Prosthesis*

DRS. J. A. BOTHWELL and W. G. SWITZER

In Full Denture Prosthesis instruction will be given on impressions, bite taking, setting up teeth and finishing. The course given will be essentially practical, the instructor carrying through to completion a full upper and lower case for a patient.

*Operative Dentistry and Therapeutics*

DRS. A. E. WEBSTER and L. F. KRUEGER

The course in the Department of Operative Dentistry will especially cover the management and treatment of children's teeth, cavity preparation for inlays and attachments, and methods of determining how long a human denture will last and how to determine the relation of diseased teeth to certain general diseases.

*Orthodontia*

DRS. G. G. HUME, C. A. CORRIGAN and C. A. KENNEDY

This course will be so planned as to be of special value to general practitioners in dentistry who may desire to undertake the treatment of some of the more simple cases in Orthodontia. These will be discussed both from the standpoint of diagnosis and treatment. There will also be given a short laboratory course covering the materials to be used in technique and the construction of appliances. Selected cases from practice will also be shown.

*Periodontia*

DRS. HAROLD K. BOX, W. G. TRELFORD, C. A. SNELL, C. E. SUTTON and R. M. BOX

The work will cover the subject of Periodontia, embracing the pathology, etiology, diagnosis and treatment of Periodontal Disease. Members of

this group will be assigned patients in the Infirmary and will be expected to provide themselves with the following instruments which may be obtained from local dental dealers:

McCall scalers (SSW), 4, 5, 6, 7, 8, 9, 13, 14, 17, 18.

Box Periodontal probes, 1, 2, 3, 4.

Box Periodontal curettes, 1, 2, 3.

#### *Preventive Dentistry*

DRS. WALLACE SECCOMBE and M. A. COX

The problem of susceptibility and immunity to dental disease will be studied with special reference to diet and nutrition. Diet Charts and Tables of Foods designed to meet the needs of the general dental practitioner, enabling him to make an intelligent study of susceptible cases in office practice, will be presented. Practical phases of oral hygiene will be discussed.

#### *Clinical Dentistry and Diagnosis*

DR. A. D. A. MASON

Special reference will be made to Radiography, Pulp Vitality Test and Transillumination in dental diagnosis.

#### *Dental Praxis*

DR. F. J. CONBOY

The course will consist of three lectures covering the development and management of a dental practice. The subjects of analysis of the possibilities of progressive advancement, the extension of acquaintance by well-selected contacts, the creation of favourable impressions, character analysis and management of patients, fixing and collecting fees and modern and efficient business systems will receive consideration.

### REGISTRATION AND OPENING LECTURE

Applications will be received by mail but all registrants should be present at the Dental Building, 240 College St. (corner Huron St.), at 9.00 o'clock on the morning of Monday, 12th September, 1927. The opening lecture will be given at 9.30 a.m.

### PRELIMINARY READING

Graduates may avail themselves of the facilities of the Faculty Library to secure books for study previous to or during the progress of the course.

### FEE

Fee for course for Dental Practitioners, \$25.00. Fee payable to the Bursar, University of Toronto, Toronto 5.

### REGISTRATION FORMS

Registration forms will be forwarded upon application to the Secretary, Faculty of Dentistry, 240 College Street, Toronto 2, and should be returned by August 20, 1927.

## ANNUAL COURSE FOR DENTAL PRACTITIONERS

SEPTEMBER 12TH-17TH, 1927

## TIME-TABLE

HOUR	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
a.m. 9.00	Registration and Opening Lecture	Dental Surgery and Anaesthesia	Dental Surgery and Anaesthesia	Dental Surgery and Anaesthesia	Dental Surgery and Anaesthesia	Dental Surgery and Anaesthesia
10.00	{ (a) Operative Dentistry or (b) Full Denture Prosthesis or 7 Hours { (c) Dental Surgery and Anaesthesia (d) Periodontia					
11.00		Periodontia	Periodontia	Periodontia	Clinical Dentistry and Diagnosis	Clinical Dentistry and Diagnosis
LUNCHEON						
p.m. 1.30	Dental Praxis	Dental Praxis	Dental Praxis	Orthodontia	Orthodontia	
2.30	Preventive	Preventive	Preventive	Preventive	Preventive	
3.30 to 5.30	{ (a) Partial Denture and C. & B. Prosthesis or 10 Hours { (b) Dental Surgery and Anaesthesia or (c) Orthodontia for the General Practitioner. (d) Periodontia					

NOTE—Daylight Saving Time.

## GENERAL INFORMATION

### THE UNIVERSITY LIBRARY

The University Library is contained in a building of its own, situated on the east side of the campus that lies to the south of University College. All students who have paid a library fee to the Bursar of the University are entitled to the privileges of the Library. Besides Reading Rooms the building contains Departmental Studies, which may be used as study-rooms by honour students in the various branches in which the Professors hold seminary courses, and private studies, intended for members of the Faculty or advanced students engaged in research work. The Library is opened at 8.45 every morning and remains open until 10 at night during the academic term. Books in ordinary use may not be taken out of the building during the daytime, but are lent for the night toward 5 p.m., to be returned the following morning before 10 o'clock. Books not in general demand may, on application, be borrowed for a longer period. Failure to return a borrowed book at the proper time and other breaches of the regulations are punishable by fine or suspension from the privileges of the Library.

### THE DENTAL LIBRARY

The library housed in the Dental Building is composed of two parts, the Harry R. Abbott Memorial Library (the property of the Royal College of Dental Surgeons of Ontario) and a departmental library of the University.

All the books in both these divisions are included by the University Librarian in the card catalogue, and in addition for the convenience of the graduates, the Faculty issues a small printed catalogue, copies of which may be obtained upon request.

It is desired to have the library as useful as possible and the Faculty Librarian will be glad to co-operate with the members of the profession in making the Dental Library available to graduates as well as undergraduates.

## ROYAL ONTARIO MUSEUM

### ARCHAEOLOGY, GEOLOGY, MINERALOGY, PALAEOONTOLOGY, ZOOLOGY

Students of the University in all departments are recommended to avail themselves of the privileges of the Museum, which, although under separate control, is intimately connected with the work of the University.

The Museum is open on all week days from 10 a.m. to 5 p.m., Sundays 2 to 5 p.m. The admission is free to the public on Tuesday, Thursday, Saturday and Sunday. On other days an admission fee of fifteen cents is charged.

By a resolution of the Board of Trustees all regular students of the University may be admitted free on all days of the week by presenting their card of registration.

### HART HOUSE

Hart House, the gift of the Massey Foundation, is so called in memory of Mr. Hart Massey. In its widest interpretation it seeks to provide for all the activities in the undergraduate's life apart from the actual work in the lecture room. It affords all the facilities of a first-rate club. In the beauty of its architecture and the various functions which it performs it is unique on this continent.

Hart House contains completely equipped club rooms, including common rooms, reading room, music room, lecture room, sketch room, photographic dark rooms, the Great Hall, which is the students' dining hall, a small Chapel, rooms reserved for religious organizations in the University, gymnasium, squash courts, swimming pool, running track, rifle range, billiard room, library and Hart House Theatre.

Hart House is open from 8.00 a.m. to 11.00 p.m. daily and meals are served in the Great Hall throughout the academic year. Members are entitled to full privileges of all rooms in the building between these hours and the use of the gymnasium, pool, showers and locker rooms until 6.30 p.m. each day, except Sunday, subject to the regulations of the Athletic Association.

The Library contains a good selection of books of general interest. These books must not be taken from the room.

Sunday Evening Concerts are given by the leading musicians of the city at 9 p.m. in the Great Hall on certain Sundays during the session, and music recitals take place at 5 p.m. every Friday in the Music Room.

The Sketch Room is equipped with facilities for drawing and painting. Weekly drawing and painting classes are given by a qualified instructor and frequent exhibitions of pictures and lectures on Art are arranged.

A group of rooms is set apart for the use of the Faculty Union. A dining room and a common room are also reserved for Graduate Members. Six bed-rooms are available for the use of guests, at a reasonable charge.

The Warden is entrusted with the general supervision of the whole house in co-operation with the following committees: House, Hall, Library, Music, Billiard, Sketch, Camera and Squash. These committees consist of two senior members, a graduate member, the Warden and a full representation of undergraduates. The undergraduates are elected annually by their fellow students. The Board of Stewards is the Senior Committee and has final control of the House, being directly responsible to the Board of Governors. It consists of the Warden (ex-officio chairman) and representatives of the President of the University, the Board of Governors, the Faculty Union, the Athletic Association, the Graduate Members, the Student Christian Association, the Students' Administrative Council and the undergraduate secretaries of all Standing Committees.

All male undergraduates proceeding to a degree in the University are members of Hart House. The annual fee of \$8.00 covers all fees in connection with Hart House and membership in the Athletic Association for the academic year (September to May). Membership Cards may be obtained at the Warden's Office on presentation of the Bursar's receipt for fees paid.

Hart House has no endowment whatsoever, and is entirely dependent for its upkeep on the fees received from graduates and undergraduates and from various sources of revenue in the House itself.

Other male students in the University, or students in the affiliated or federated institutions receiving instruction in the University, may become members of Hart House on payment of the required fee at the Warden's office.

Graduates are entitled to the full privileges of Hart House on payment of an annual fee of \$10.00. Out-of-town graduates may become members on payment of an annual fee of \$2.50.

### HART HOUSE THEATRE

Hart House Theatre is a Repertory Theatre existing to promote the interests of dramatic art in the widest sense. Its performances are open to members of the University and to the general public. The Theatre is operated by a Board of Syndics, who are responsible to the Governors of the University for its administration. It is the policy of the Syndics to permit the use of the Theatre by those dramatic societies within the University which are endeavouring to do serious work.

### UNIVERSITY RESIDENCES

#### RESIDENCE FOR MEN

By the generosity of the late E. C. Whitney, Esq., Mrs. Whitney and friends, the University offers to one hundred and fifty men the advantages of residential life and excellent accommodation within its own grounds. The Residence consists of three Houses situated on the north side of Hoskin Avenue, opening upon a quadrangle, the fourth side of which is formed by Devonshire Place. They stand about two hundred yards to the north of University College and close to Hart House. The buildings are known as the South, East and North Houses.

Each House contains twenty-four single rooms, one single suite, and eleven suites, a suite comprising a study and two bedrooms. Two large rooms in each building, each with an open hearth, have been set aside as common rooms. A lavatory with hot and cold shower baths is provided for every eight men. The buildings are heated by steam and lighted by electricity.

The University supplies the table, chairs, book-case, chiffonier, bed, mattress, pillows, linen and window shades for each room; it is prepared to furnish a desk-lamp for a nominal rental.



The rates are \$4.00 per week for a single room or half a suite, and \$5.00 per week for a single suite. The rent is payable as follows: for the Michaelmas Term, when the key is issued; for the Easter Term up to April 1st, at the opening of the Easter Term; for the remainder of the Easter Term, April 1st. These charges cover heat, light, house-service, and house-laundry. To cover local telephone service each student in residence will be required to pay the Bursar an annual fee of \$2.00. There is no separate dining hall connected with the Residence, but board may be obtained at the adjacent University Dining Hall in Hart House.

Except under very special circumstances occupants who withdraw at any time during the session will be required to pay the full rent up to April 1st.

Applications for rooms must be made in writing to the Secretary of the Residence Committee (address the Registrar's Office) and must be accompanied by a deposit of \$5.00. This deposit will be returned if the application is not granted, but will be forfeited if a room is assigned to the applicant and not taken by him, unless notice of his refusal of the room is received by the Secretary in writing before September 15th. It will be returned in full at the end of the College year if the room key is given back and the room and furniture left in a satisfactory condition. The following principles govern the allotment of rooms: (i) No student, who as a result of the annual Spring examinations is not assured of being able to proceed to a subsequent year, will be admitted into the Residence. Exception to this rule will be made in the case of a student in the Faculty of Medicine who has obtained standing at the May examination, but is debarred by the rules of that Faculty from proceeding to the subsequent year until he has passed his Supplemental examinations. Such a student will be assigned a room provisionally, but cannot occupy it unless he passes his Supplemental examinations in September. (ii) The rooms in each house will be distributed among the various Faculties and Years. (iii) A limited number of rooms will be reserved for members of the incoming First Year until September 12th. (iv) Applications will be considered in order of priority.

The University lays down three general rules, designed to prevent hazing, the use of intoxicants and gambling. The students in each House shall elect a House Committee, which is entrusted by the University with the making and enforcing of any other needed rules and with the maintenance of order. A member of the Faculty resides in each House to act as friend and adviser to the men in residence.

#### RESIDENCE FOR WOMEN

Accommodation for thirty women students is afforded by Argyll House at 100 Queen's Park; the rate for rooms is \$4.00 per week for the 32 weeks of the academic year, payable to the Bursar in advance by the month or term. Applications should be made to the Secretary of the Argyll House Committee, 79 St. George Street, Toronto, 5.

## STUDENTS' ADMINISTRATIVE COUNCIL

The Students' Administrative Council has been entrusted by the Caput with supervision of the conduct of the students, and has power subject to the approval of the Caput, to deal with violations of the regulations governing conduct.

Any student who may be convicted of having taken part in a parade or procession through the city which has not been authorized by the police authorities, after application by the Executive of the Students' Administrative Council, will be severely disciplined.

## WOMEN STUDENTS' ADMINISTRATIVE COUNCIL

The Women Students' Administrative Council is the representative organ of the women students of the University of Toronto and aims to coördinate all intercollegiate activities. It consists of representatives from all colleges and faculties.

## THE JOINT EXECUTIVE, STUDENTS' ADMINISTRATIVE COUNCILS

The Joint Executive, Students' Administrative Councils, comprising the Executives of the Students' Administrative Council and the Women Students' Administrative Council, assumes financial responsibility for the publication of *The Varsity* and *Torontonensis*. The annual fee of \$4.00 paid by all undergraduates proceeding to a degree provides for the year's subscription to *The Varsity* and entitles the student to a copy of *Torontonensis* on graduation.

## THE ATHLETIC ASSOCIATION

University athletics for men are under the entire control of the University of Toronto Athletic Association, of which the executive body is the Athletic Directorate. This consists of:

- The President of the University,
- Two members of the faculty, appointed by the President,
- Two graduates, appointed by the Athletic Advisory Board,
- The Medical Director and the Financial Secretary (ex-officio),
- Five undergraduates, elected annually,
- An undergraduate representative, appointed by the Executive of the Students' Administrative Council.

The Directorate alone has the power to sanction the use of the name "The University of Toronto" in connection with men's athletics, and no men's athletic event can be held in the University without its approval. It has control of the athletic field, the gymnasium, the swimming pool, and other conveniences in connection with athletics in Hart House, and is empowered by the Board of Governors to make the necessary arrangements to effect the carrying out of the University regulations requiring Physical Training for men.

## WOMEN'S ATHLETIC ASSOCIATION

University athletics for women are under the entire control of the University of Toronto Women's Athletic Association, of which the executive body is the Women's Athletic Directorate. This consists of:

- The President of the University,
- Two women members of the faculty, appointed by the President,
- Two women graduates, elected by the Women's Athletic Advisory Board,
- The Medical Advisor for Women, the Physical Directress, and the Financial Secretary (ex-officio),
- Five undergraduates, elected annually.

The Directorate alone has the power to sanction the use of the name "The University of Toronto" in connection with women's athletics, and no woman student may participate in any athletic event during the academic year without its permission. The Medical Advisor for Women and the Physical Directress are authorized to arrange for such Physical Training for women as is required by the University.

## STUDENTS' PARLIAMENT

The undergraduates of the Faculty of Dentistry conduct all student activities through an organization known as the Students' Parliament. The President of the Parliament and the President of each class is elected yearly from the student body, as well as the managers of all athletic teams, and these compose the Cabinet of the Students' Parliament. This organization manages and equips teams for football, hockey, basketball, water polo, and track, and acts in the interests of the whole student body, both in local matters and in connection with the Students' Administrative Council of the University.

The college magazine, *Hya Yaka*, is published by the undergraduates. It affords the students an opportunity for expression in the journalistic field, and a medium for the discussion of athletic, social and literary activities of the student body.

## CANADIAN OFFICERS' TRAINING CORPS

The Toronto Contingent of the Canadian Officers' Training Corps was organized in 1914 and is a unit of the non-permanent Active Militia. Its primary object is to provide students at Universities with a standardized measure of military training with a view to their qualifying for commissions in the country's auxiliary forces. C.O.T.C. certificates of qualifications exempt their holders from examination for commissioned rank on joining a Militia unit in Canada, or, if resident in the British Islands, render them eligible for commissions in the Army Reserve of Officers, the Militia, or the Territorial Army.

The facilities which are offered by the contingent for obtaining a qualification while at the University are intended to enable young gentlemen to give personal service to their country with the least possible interference with their civil careers, to ensure that units have their establishments complete in the junior commissioned ranks, and to build up an adequate reserve of scientifically trained officers who have completed a period of consecutive and systematic military training, on academic lines, of a nature calculated to produce good officers.

The contingent provides the practical work for students taking the Military Studies option for the Arts degree, as also physical exercise for students who may choose this as the form in which they will take their compulsory Physical Training. In addition to service in the corps for a University credit, students of any year or faculty are trained in it to qualify for officers' certificates in the Infantry, Artillery, Engineers, Army Medical Corps and Signallers, writing on the examinations set by the War Office for members of O.T.C. contingents throughout the Empire.

There are at present four companies—in the Faculties of Arts, Medicine and Applied Science—and the training of each is so arranged that on leaving the University students are qualified for commissions in that branch of the Militia to which their University course particularly applied.

The present Headquarters are at 184 College Street, and include armouries, members' reading room, library and lecture rooms.

The Contingent's Staff is:—

Officer Commanding, LIEUT.-COL. T. R. LOUDON.

Second in Command, MAJOR J. R. COCKBURN, M.C.

Company Commanders, MAJOR H. H. MADILL; MAJOR W. G. COSBIE, M.C.; CAPTAIN W. J. T. WRIGHT, M.B.E.

Adjutant, LIEUT. F. W. BERTRAM.

Paymaster, CAPT. T. A. REED

Contingent Sergeant-Major, S.-M. W. HUNT, late Royal Welsh Fusiliers.

## LICENSURE FOR DENTAL PRACTICE

### HISTORICAL REVIEW OF REQUIREMENTS FOR THE PRACTICE OF DENTISTRY IN ONTARIO FROM 1868 TO 1925

1868—The Act Respecting Dentistry passed.

All persons being British subjects by birth or naturalization, who had been constantly engaged for five years and upwards next preceding the passing of this Act, in established office practice of the Profession of Dentistry in the Province of Ontario, were granted the title of Licentiate of Dental Surgery.

All persons being British subjects by birth or naturalization, who were engaged at the time of the passing of this Act, in the Profession of Dentistry, or who, not having been residents in Ontario, had three years' experience in the practice of Dentistry, were required to pass the prescribed examinations.

The Board of Directors was constituted as the Provincial Board of Dental Examiners for Ontario.

1869—Any person commencing the study of Dentistry after the passing of the Act was required to attend one session at a dental college.

Two years' indentureship.

1872—Matriculation examination held by members of the Board at Kingston, Toronto, and Hamilton in Orthography, English History and Composition, English Grammar, Geography and Arithmetic.

1875—Three years' indentureship.

The School of Dentistry opened its first session in November.

1876—Two years at the School of Dentistry of the Royal College of Dental Surgeons.

Two years' indentureship.

1878—High School Entrance certificate for matriculation.

1880—High School Intermediate certificate for matriculation.

1882—Two and one-half years' indentureship.

1888—Non-professional Third Class certificate for matriculation.

Three years' indentureship.

1889—Latin compulsory as one of the matriculation subjects.

1892—Three sessions at the School of Dentistry of the Royal College of Dental Surgeons.

Three and one-half years' indentureship.

1896—Arts Matriculation. Departmental Junior Matriculation or Second Class Teachers' Certificate including Latin required for the R.C.D.S. matriculation.

- 1903—Four sessions at the School of Dentistry of the Royal College of Dental Surgeons.
- 1908—Compulsory indentureship abolished, except between third and fourth years.
- 1912—Compulsory indentureship entirely abolished.
- 1914 to 1918—The Great War.
- 1917—*Special Sergeants' Course* (February) for the purpose of training sergeants for the Canadian Army Dental Corps.  
*Sergeants' Matriculation*: Second Class Teachers' Certificate, or eight papers, Junior Matriculation.  
*Regular Session*: Required that all subjects of R.C.D.S. matriculation be completed before enrolment.  
*Enlisted candidates* admitted on Second Class Teachers' Certificate, or eight papers, Junior Matriculation.
- 1919—Five-year course established. Three hundred and twenty, mostly war veterans, enrolled in four-year course; other applicants, including partial matriculants, registered in five-year course.  
 Twelve months or more of satisfactory service in the Canadian Army Dental Corps entitled candidates to cover subjects of four-year course in three sessions.
- 1920—War veterans and candidates with standing higher than Junior Matriculation admitted to four-year course.
- 1921—Five-year course compulsory for all candidates except war veterans who had served one year or more on an active front.
- 1922—All candidates were required to attend the School of Dentistry of the Royal College of Dental Surgeons of Ontario, or the Arts Department of a Provincial University to obtain Pre-Dental credits. Special concessions to returned soldiers discontinued.
- 1923—Matriculation: Pass Matriculation (Middle School) in subjects of English, History, Mathematics, Latin, Experimental Science (Physics and Chemistry), and one of Greek, German, French, Italian or Spanish (preferably French).
- 1925—The School of Dentistry became the Faculty of Dentistry of the University of Toronto.
- 1927—Honour Matriculation in prescribed subjects in addition to Pass Matriculation required for entrance. (See page 12.)

#### PRESENT REGULATIONS REGARDING LICENSE TO PRACTISE DENTISTRY IN ONTARIO

Anyone desirous of practising Dentistry in the Province of Ontario must procure a license from the Board of Directors of the Royal College of Dental Surgeons of Ontario.

*Class A.*—Candidates who have attended and successfully completed the regular five year course as given in the Faculty of Dentistry, University of Toronto, may be granted the License without further examination and without fee.

*Class B.*—Candidates who have obtained advanced standing in and graduated from the Faculty of Dentistry, University of Toronto, are granted the License upon successfully completing the examinations of the years which they attended, and in addition the final examinations of earlier years, exclusive of the First Year. The fee for License is \$50 for Class B, a credit of \$10 being allowed for each year in attendance at the Faculty of Dentistry, and this fee is required to be paid to the Secretary of the Royal College of Dental Surgeons with the application for examination.

*Class C.*—Those who have graduated from other approved Dental Colleges are required:

1. To have held before commencing their Dental studies the necessary qualifications to matriculate into the Faculty of Dentistry of the University of Toronto.

2. To be recommended by the Dean of the College from which they graduated.

3. To present credentials as follows:

- (a) If dental course was commenced previous to September, 1921, present graduation diploma granted upon the basis of a four-year course.

- (b) If dental course was commenced in September, 1921, or thereafter, to present graduation diploma granted upon the basis of a five-year course (including one pre-dental year taken at a Provincial University).

4. To pass such written examinations as are prescribed by the Board of Directors of the Royal College of Dental Surgeons.

5. To pay the license fee of \$50 with the application for examination.

All applicants are required to make application for examination to the Secretary of the Royal College of Dental Surgeons on the prescribed form at least one month previous to the examination; to satisfy the clinical staff of the Faculty of Dentistry of the University of Toronto as to technic and clinical credits; to pay the required fee; and to sign a covenant to practise ethically and to maintain the dignity and honour of the profession.

For further information regarding license to practise Dentistry in the Province of Ontario communicate with the Secretary of the Royal College of Dental Surgeons, Dr. W. E. Willmott, 240 College St., Toronto 2.

## DOMINION DENTAL COUNCIL OF CANADA

In each of the Provinces of Canada, the Legislatures have enacted laws regulating the practice of Dentistry, and in each Province the Dental Act provides for a Corporate body, which grants licenses to practise Dentistry in the Province.

In the year 1906 representatives from each of the dental corporate bodies of the nine Provinces of the Dominion met to discuss the feasibility of formulating a curriculum in Dentistry, holding an examination and issuing a certificate of qualification, which would admit the holder, without further examination, to registration in any, or all, of the Provinces entering into the agreement, on payment of the provincial registration fee. All of the Provinces, with the exception of Quebec and British Columbia, have entered into such an agreement and have formed a Dominion Dental Council. The only dental faculties recognized by the Dominion Dental Council are those situated within the agreeing provinces. Therefore, a student in this Faculty is admitted to the D.D.C. examinations and has the privilege of taking them in the Faculty Building from time to time upon completion of the various subjects throughout the course. Students who have attended at least four sessions in this Faculty and have successfully completed the examinations of the Second, Third, Fourth and Fifth Years are admitted to practice in the Province of Ontario without further fee or examination, but those candidates who expect to practise in another province are recommended to obtain the D.D.C. certificate which will enable them to register without further examination in any province of Canada except Quebec and British Columbia.

Dominion Dental Council examinations are held twice a year, beginning on the Tuesday of the week in which the first of June occurs, and on the Tuesday in which the twentieth of September occurs. The entire fee for examinations and certificate is \$50. For each subject written \$5.00 must be paid until the total amount is reached and a candidate is required to present receipt before writing. Fees are payable to Dr. W. D. Cowan, Secretary, Dominion Dental Council, Regina, Sask. A booklet containing full information concerning the Council will be sent upon application to him.



## DENTAL NURSES' COURSE

An eight months' course for dental nurses is given in the Faculty of Dentistry by arrangement with the Royal College of Dental Surgeons of Ontario. Particulars of this course will be found in a separate bulletin issued by the Faculty, copies of which may be obtained upon application to the Dean, Faculty of Dentistry, 240 College St., Toronto 2.

## FACULTY PUBLICATIONS

A form of service available to both graduates and undergraduates is that of Departmental Bulletins covering phases of Dentistry not treated in the available dental literature. These publications are punched to fit the standard hole students' looseleaf note book and in many cases represent synopses of parts of the lecture or laboratory course.

These are published by the University of Toronto Press and may be secured at a nominal charge by application to the Press.



---

DEPARTMENT OF SOCIAL SERVICE

---

## THE DEPARTMENT OF SOCIAL SERVICE

In 1914 the University of Toronto established, in its Department of Social Service, the first university training school in Canada for social workers; and in 1920 it founded the first university chair of Social Science.

A. *The Diploma Course* is covered in two years. It is planned in the belief that a thorough training for any kind of social work must be based on the study both of the whole social organization, and of individual, family and group problems. It is highly desirable that the student should gain a working knowledge of the leading forms of social service, in whatever form his future work may lie.

B. *Part-time Students.* Every encouragement is given to students who are only able to give part of their time; most of the classes are open to them on consultation with the staff, though *field work cannot be provided*. Part-time study is found specially valuable for:

1. Those already doing some form of social work, but desiring more knowledge, either in their own or some related subject, or in the general setting of social service.
2. Volunteer workers wishing to increase their effectiveness, and understand the problems with which they come in contact.
3. Those desirous of exercising their trusteeship on committees of social agencies, or administrative boards.
4. Those wishing to know more about the problems of the community.

## ADMISSION

Intending applicants are advised to arrange if possible for a personal interview with the Director at the Social Service Building, 45 St George Street.

Application forms may be obtained from the Secretary to whom they should be returned as soon as possible. Personal references are required.

Diploma students will be admitted on the following qualifications:

1. Graduation from university or college. This, though not essential is the most desirable preparation for entrance; both from the point of view of the work itself, and for eventual leadership in social service.

Applicants who have during their undergraduate course taken good standing in any of the subjects of the Diploma course may be given exemption; or, where possible, admitted to more advanced studies.

While any university course is valuable as background and discipline in study, students planning their course with the Diploma in view will find the most direct preparation in such subjects as Psychology, Economics, Sociology, Political Science, Biology, Philosophy.

2. Matriculation is the minimum entrance requirement. The Department is open to consider applications from non-matriculants, but only if their experience has been educationally (not necessarily academically) more than equal to matriculation.

Applicants with previous experience of social work will have special consideration, if they show sufficient general training to be able successfully to handle the work, and if their experience has been such as to give reasonable warrant of their fitness for the vocation.

3. The age limit is from 21 to 35 years.

(a) Applicants over the age limit will be admitted only if their education, social experience and prospects of successful training are satisfactory.

(b) Intending applicants under the limit are urged to spend one or more years in preparatory university work, giving voluntary service in settlements or clubs. The Department will gladly assist, if desired, in the choice of courses, looking to the time when students leaving school intending to train for social work (but unable to give the time required for a degree course), will take two years of selected courses in the University, thus completing with the Diploma a carefully planned 4 years of university education.

4. The full-time work of the second year is open to those who have completed the requirements of the first year, or who have taken its equivalent in an accepted training school elsewhere.

5. Intending applicants who wish to take advantage of the interval before entering can be advised as to reading or practice; such preliminary work is always an advantage.

6. All full-time students are admitted on probation. Any student who is, in the opinion of the staff, unlikely to succeed in social work, will be advised to withdraw.

### RANKING FOR DIPLOMA

In *Written Work* the pass mark is 60% on the total of all papers and 50% on each paper.

First Year students may be conditioned in two subjects if their general average is 60% or over.

Second Year students may be conditioned in two subjects if their general average is 70% or over.

Satisfactory standing in *Field Work* is required for a pass in both years.

### PROGRAMME OF DIPLOMA COURSE

<i>First Year</i>	<i>Second Year</i>
Economics	Economics
Psychology	Psychology
Ethics	Ethics
Community Organization	Social Evolution

*First Year*

Social Diagnosis  
 \*Case Work Methods  
 \*Child Welfare  
 Public Health  
 Industrial Legislation  
 Teen-age Work  
 Settlements  
 Recreation

*Second Year*

Social Work Administration  
 \*Case Work Methods  
 \*Child Welfare  
 \*Public Health  
 Social Legislation  
 Psychiatry

\*Not open to part-time students except by special arrangement.

## FIELD WORK

The development of social work in Toronto has made good field work possible. Many of the city agencies co-operate with the Department by providing supervised work for students, while other agencies and institutions co-operate by providing facilities for observation and study.

First year students begin practical work in settlements. There they become acquainted with people who live in crowded districts, and also learn a good deal of the technique of group work. During April and May students devote full time to field work, choosing between the two general fields of case work and community work. The stipulation, however, is made that some portion of the field work of either first or second year must be in case work, unless the student has had such experience previous to entering the course. This insures each student some knowledge of group work and of case work. Students whose experience warrants it are given a choice of specialized forms of work in the second year.

Lectures and field work run concurrently throughout the second year. At intervals during the session round tables for the discussion of special aspects of practical work are arranged.

MISS MCGREGOR

## LECTURE COURSES

## FIRST YEAR

1. INTRODUCTION to the study of social problems.

PROFESSOR DALE

2. ECONOMICS

A course on the elementary principles of economics; value, utility; wealth, individual and national; the relation of wealth to welfare; competitive and anti-competitive forces; followed by certain applications to the problems of the wage-system and its alternatives; trade-unionism, unemployment, women in industry, juvenile labour, conditions of industrial work, and the distribution of wealth and poverty.

DR. BRADY

### 3. PSYCHOLOGY

The meaning, point of view and methods of psychology. Consciousness and the unconscious. The aspects of mental development (a) sensation and association of ideas, (b) habit and instinct, (c) emotion and sentiment. Mental conflict and character.

DR. BLATZ

### 4. ETHICS

The basal conceptions in Ethics, and their application to the problems of personal conduct and social relations. The basis of morals in human nature; the influences of heredity and environment; standards, motives, and sanctions of conduct; moral education; the sphere of morals in community life.

PROFESSOR ROBINSON

### 5. COMMUNITY ORGANIZATION

The nature and development of social forms, associations and institutions, within community. The extension and development of community life. Its focal points: home, school, church, club, union. The organization of industry; of philanthropy. Experiments in social organization, the community centre, the health centre, the "city unit", the garden city, etc.

PROFESSOR DALE

### 6. SOCIAL DIAGNOSIS

Social Backgrounds. The English Poor Law, the effects of the Industrial Revolution, the Charity Organization movement, modern ideals of case-work, principles and methods, interpretation and diagnosis as the basis of treatment.

MR. STAPLEFORD

### 7. CASE WORK METHODS

Individual and family maladjustments and case-work treatment studied through the medium of case records. This course is closely related to field work, and a written study is required from Diploma students.

MISS MCPHEDRAN

### 8. CHILD WELFARE

Case studies of (a) the problems which bring children to the attention of child caring agencies, and (b) the types of care possible for such children.

MISS FLEMING

### 9. HYGIENE AND PUBLIC HEALTH

The principles of Public Hygiene, including a discussion of preventable diseases and preventable deaths. The communicable diseases are classified and their modes of infection and methods of control, elucidated. Community control of Tuberculosis, Venereal Diseases and Infant Mortality are emphasized. Industrial Hygiene, Vital Statistics and the activities of governmental and voluntary health promoting agencies are considered.

MRS. JOHNSTON

## 10. INDUSTRIAL LEGISLATION

Modern tendencies in the industrial order. State-help and self-help. Canadian movements. The principle of minimum standards, in wages, hours and working conditions. The hazards of the wage-earner. Unemployment. Industrial casualties. Sickness. Old age. The framing of laws. Their administration.

PROFESSOR MACMILLAN

## 11. TEEN-AGE WORK

Discussion of Educational principles to be developed in connection with Boys' Work. A study of Adolescent Psychology—the physical, mental, social and religious development of the boy through the various stages of life. Practical problems of boys' workers, including discipline, programme-making and camps. A study of programmes and organizations working with boys in Canada.

MR. WRIGHT

## 12. SETTLEMENTS

The history of the settlement movement, the nature of the work undertaken by settlements and the results which they accomplish. Plan of organization and the departments which usually develop, *e.g.*, social, educational, religious, medical, etc. Value of club work. Adaptability of settlements to different districts and conditions. Application of their principles to rural and urban centres and to community centres of various kinds.

MRS. PARKER

## 13. RECREATION AND PLAYGROUND WORK

The playground and recreation centre movement, history, organization and administration. The playground supervisor. Community organization and recreation. Mental, moral and physical value of recreation.

Part of the course will be devoted to the practice and teaching of organized games, folk dancing and musical games, suitable for both adults and children.

MISS HODGKINS

## SECOND YEAR

## 14. ECONOMICS

The Industrial Revolution, tracing the development of modern capitalism, the factory system, associations of capital and of labour, industrial legislation, and explaining in general the social and political reactions of modern industrial changes.

DR. BRADY

## 15. PSYCHOLOGY

Man in society: the herd instinct—suggestion, sympathy, imitation. Work and fatigue, play and recreation. Adolescence, abnormality, delinquency, and functional mental disorders. Education and re-education.

STAFF OF THE DEPARTMENT OF PSYCHOLOGY



16. ETHICS

Origin and development of morality. Basic concepts in moral theory. Problems of conduct, personal, professional and social.

PROFESSOR ROBINSON

17. SOCIAL EVOLUTION

Primitive society types and stages. Family, clan, tribe and nation. The evolution of institutions. The various modes of competition and co-operation. Various conceptions of the state and society, with special reference to contemporary discussions and experiments in reconstruction.

PROFESSOR DALE

18. SOCIAL WORK ADMINISTRATION

A discussion course dealing with the problems of social work administration; relations of staff to Executive Officer, Board and Public; inter-relations of organizations; community organization through Federations and Councils of Social Agencies; social work publicity, etc.

MR. STAPLEFORD

19. CHILD WELFARE

Discussion of the problems and processes involved in the work of a child placing agency. A close study of the situations bringing children into care; the preparation of children's histories; the use of the institution and of the various types of foster home care; the finding and investigation of foster homes; the use of forms and records.

MISS FLEMING

20. SOCIAL LEGISLATION

The principles and administration of the laws dealing directly with family and child welfare, such as the acts relating to Mothers' Allowances, Children's Protection, Juvenile Delinquents; completing with Course 10 a study of welfare legislation.

MR. MILLS

21. PSYCHIATRY

Characteristics of the normal mind. Basis of human behaviour. Reflex activities. Habit formation. Emotions and instincts as driving forces in human behaviour.

Behaviour problems, especially in children, with emphasis on environmental and emotional factors. Relationship of social work to the adjustment of these problems.

Types of mental reactions. A rapid survey of the field of clinical psychiatry, with, as far as possible, demonstration of various types of psychoses. Discussion of various theories of causes of mental diseases. Formal classification.

History taking.

DR. LEWIS

## FEES

1. *The Diploma Course.* The fees are \$49.50 for each year, payable *in advance* as follows:

(a) \$5 to the Secretary of the Department.

(b) \$44.50 to the Bursar of the University, Simcoe Hall. (\$4.50 of this is the subscription to the Students' Administrative Council).

Students may pay in instalments as follows: \$24.50 in October, and \$21 in January.

After October 31, a penalty of \$1 per month will be imposed until the whole amount is paid. In the case of payment by instalments the same rule as to penalty will apply. A student who is in arrears will not be admitted to lectures or field work.

2. *Single Courses.* The fee is as follows:

(a) \$2 to the Secretary, irrespective of the number of subjects.

(b) \$5 to the Bursar, for each subject.

3. *Supplemental examinations* are held in September, and the fee of \$10 is payable in advance to the Bursar.

4. Students must be prepared for some expenditure on books, and on car fares for field work.

## SCHOLARSHIPS

*The Alumni Scholarship* of \$100 is given by the Alumni Association of the Department; awarded 1925-6 to Helen M. Fisher, LL.B.

1926-7 to Mary I. Jennison, B.A.

*The Rabbi Brickner Scholarship* of \$50, endowed by the Federation of Jewish Philanthropies in honour of Barnett R. Brickner (Rabbi of the Holy Blossom Synagogue 1920-5), as a fitting tribute to his devotion to the service not only of his office, but of the whole community. While it is the hope of the Federation that there will always be a Jewish student found worthy of the award, it was not their intention to reserve the nomination to members of their own communion.

awarded 1925-6 to Sarah Falick

awarded 1926-7 to Gladys Papernick.

The Sisterhood of the Holy Blossom Synagogue make a grant of \$50 from their Scholarship Fund;

awarded 1925-6 to Helen Goldberg

1926-7 to Jean Smookler.

The above awards are made only to students of attainment and promise; but consideration is given to the financial needs of applicants.

Announcement of the conditions and dates of the awards for 1927-8 will be made during the session.

## THE LIBRARY

The Library, through the generosity of the McCormick Estate, possesses a good collection of books, reports, periodicals and bulletins on social subjects. In the case of full-time students their tuition fees include the library fee; part-time students wishing to take out books are required to pay the departmental fee of \$1.00. The use of the library and reading room is extended to social workers and other interested readers, on payment of the fee of \$1.00. The staff welcomes enquiries for information on social matters and does its best to meet them.

The Library hours (holidays excepted) during the session are: 9 a.m. to 12.30; 2.30 p.m. to 5; Saturdays 9 a.m. to 12. The library will be closed from July 1st to August 2nd inclusive.

## INFORMATION

For further information address *The Department of Social Service, University of Toronto*. Those who are within reach will find a personal consultation at the office desirable. The office is closed during July, and reopens on August 3.



---

DEPARTMENT OF PUBLIC HEALTH NURSING

---

## THE DEPARTMENT OF PUBLIC HEALTH NURSING

This Department which began its work in September 1920, is a school in which young women may make a study of public health nursing, its theory and practice.

The public health nurse is directing her energies to the teaching of health and the prevention of disease. She is being taught to work back from sickness and physical defect to a study of their causes and thence to a study of the means of prevention, in order that she may teach, and may apply in the community, those means of prevention. The nurse is usually the connecting link between the public health administrator and the people whom he would reach with his health teaching and health legislation. Her work lies in the home, the school, the factory and the clinic.

The establishment of the Department of Public Health Nursing in the University was made possible in 1920 through the generous assistance of the Ontario Division of the Canadian Red Cross Society, which Association undertook to meet the expenses of the new Department for a period of three years. In 1923, full responsibility for the Department was assumed by the University. This year the Department becomes a unit in the new School of Hygiene.

Starting with September of 1926 two alternative courses are offered by this Department as methods for the study of public health nursing. One of these courses is the same one that has been given in the past. It is open only to graduate nurses and consists of one year of study of the theory and practice of public health nursing and it leads to the University's Diploma in Public Health Nursing. The second is a new arrangement of work. It consists of two separated years of University work, the second of which is open only to the graduates of a prescribed course of two years' training at the Toronto General Hospital. Thus in four years the student will qualify for the Nursing Diploma of the Toronto General Hospital and also for the University's Diploma in Public Health Nursing. A full description of each course is given in this Calendar. If this experiment proves successful it is hoped that arrangements can be made whereby other hospitals in this Province will also co-operate in the giving of the necessary two years of hospital training.

## OPPORTUNITIES FOR THE NURSE IN PUBLIC HEALTH WORK

The developments in this work during the last few years have been so extensive that we would emphasize the opportunities which it offers. There is an increasing demand for the nurse who, usually as a member of the local Health Officer's staff, will carry on various forms of health work. Infant hygiene and school nursing are usually the first two services to demand attention: starting with those, other specialities are added to the public health nurse's work, the scope of which varies considerably in different localities.

There are also many teaching and executive positions open to nurses but these positions all demand a very highly qualified woman. General education, technical training and personality are all of great importance and there are as yet few women prepared to meet the demands of this ever widening field. This is a piece of work which offers unbounded opportunities for interesting and valuable service, and the University course has much to offer to the student who wishes to prepare for it.

### COURSES LEADING TO THE DIPLOMA OF PUBLIC HEALTH NURSING

1. The course hereinafter called Course I. This is a one year course and is open only to graduate nurses.

2. The course hereinafter called Course II. This consists of two separated years of University work offered in connection with, and dependent upon, a two year training in hospital nursing arranged by the School for Nurses of the Toronto General Hospital.

Each of these two courses will be separately described together with the entrance requirements, fees, examinations, etc., which pertain to each one.

#### COURSE I

In this the Department offers to its students a general training course in Public Health Nursing, its theory and practice. It is hoped thus to prepare nurses to serve effectively in any public health organization.

The work of the student is divided into two parts: (1) theoretical, consisting of lecture courses and class work, and (2) practical work, which in such courses is commonly called field work.

Students will be expected to complete satisfactorily the required term work of the course before being permitted to write the final examinations.

#### LECTURE AND LABORATORY COURSES

These courses fall into two groups:

- I. Major subjects which are required of all students.
- II. Elective courses. The selection from this group must be made in conference with the Director.

#### I.

1. Public Health Nursing... .. Miss EMORY, assisted by  
Miss RUSSELL and other special lecturers

This course consists of lectures, excursions, clinics, conferences and seminar discussions. Didactic instruction includes an historical introduction to public health nursing and a study of principles, organization, administration and supervision of that work. Special problems, records and reports are given consideration. Methods and technique of five of the special branches of this work, namely, Child Hygiene, Tuberculosis, Venereal Disease, Industrial Nursing and Hospital Social Service are dealt with by special lecturers, the lecturer in each case being a nurse who has specialized in the work of that particular field.

2. Preventive Medicine and Hygiene.
  - a. Lecture Course ..... Prof. DONALD T. FRASER



Aims of Preventive Medicine; brief historical review of the development of the subject to the present time.

Preventable diseases and preventable deaths; volume and kind of present mortality and morbidity. Classification of communicable diseases. Incidence, etiology, epidemiology, modes of transmission and methods of control of communicable diseases. Methods of dealing with special public health problems, such as maternal and infant mortality, tuberculosis, venereal diseases, etc., problem of the degenerative diseases and cancer. Industrial hygiene, occupational diseases, workmen's compensation. Public health centres and clinics. Vital statistics, public health education and publicity. Physiological basis for teaching of health habits. Public health organization and administration. Community and home sanitation.

5. Laboratory Course: Elementary Bacteriology . . . MRS. M. M. JOHNSTON

3. Methods in Health Teaching . . . . . MISS RUSSELL

In connection with this course each student is required to teach a series of health lessons to the children of the elementary schools of Toronto. The supervision of this teaching is arranged by the Toronto Board of Education.

4. Social Work—Principles and Practice . . . . . MISS C. JEAN WALKER

Historical background; differentiation in modern social work; analysis of case-work method; case-work in specialized fields; co-ordination of social agencies.

5. Nutrition and Dietetics . . . . . MISS A. L. LAIRD

The course includes a discussion of the essentials of an adequate diet, the nutritive values of common food stuffs, food costs as compared with food values, the planning of dietary budgets with special reference to economic and social conditions, the feeding of school children.

6. Oral Hygiene . . . . . DR. WALLACE SECOCOMBE

A short lecture course, illustrated with charts and lantern, covering the more important dental problems as they affect the nurse. The subject is approached particularly from the preventive side, and includes developmental and dietetic influences, proper use and care of the teeth, mastication and toilet of the mouth. The diseases of the teeth and surrounding tissues, and the relation of these to general health, are discussed, along with simple remedies for the relief of pain.

7. Paediatrics . . . . . DR. ALAN BROWN

This course includes a series of lectures and lantern slide demonstrations, and where possible clinical material is demonstrated illustrating the various common conditions met with in children, and an outline of their general management, special attention being given to infant feeding.



# PRACTICAL WORK

## 1. The practical work will be arranged as follows:

(a) One month of work starting September 1st. No student may enter upon the First lecture term unless at least one month of practical work has been covered. Students may receive credit for previous experience in public health nursing (i.e. with a health department or a visiting nurse association) and in that case the practical work in September will not be required.

(b) Two months of practice between the middle of April and the middle of June.

(c) The year of study will necessarily include some participation in the practice of public health nursing during the whole lecture period, but no routine district work will be carried by the student during that lecture period, i.e. from October until March.

## 2. This practical work may be arranged with the following organizations and workers:

The Ontario Department of Health.

The Toronto Department of Public Health.

The Victorian Order of Nurses.

The Social Service Department of the Toronto General Hospital.

The Neighbourhood Workers Association of Toronto (an association doing family welfare work).

The National Tuberculosis Association (at the Gage Institute).

Industrial nurses.

Ontario Branch of the Canadian Red Cross Society.

3. Some rural and small town practical training has become available. So far such opportunities have been limited, but they will probably be more extensive in the future. Such experience will be open to the student who is prepared for a small amount of extra expense for travelling and living while out of town. Every effort is made to reduce this expense to a minimum. When the student can be placed with a county nurse working on the outskirts of Toronto, this extra cost will be slight.

## 4. Weekly conferences are held in connection with this work.

5. Written studies of the more extensive pieces of public health work in which the student engages must be submitted. These reports form one of the final tests for the Diploma.

6. Students are asked to give very careful consideration to the following information concerning practical work.

(a) The Department is dependent upon the courtesy of these health associations for this work for its students, therefore any rules made by the associations must be complied with.

(b) Difficulties of arrangement in such work may make slightly unusual demands upon the time of the student.

(c) No street uniform is worn by the students, but certain dress regulations have been imposed by the associations providing field work, and must be observed by the student *while doing field work*.

(i) A tailored cloth suit or long coat must be worn, and with that a wash blouse or wash dress for the work of the Victorian Order of Nurses.

(ii) For the work with the Victorian Order of Nurses it will be necessary for each student to provide herself with a full-length apron to be worn while in the sick room. A linen laboratory coat is very suitable for this purpose.

(iii) *No fur coats, fur-trimmed coats or fur collars may be worn while at work with the Victorian Order of Nurses.*

(d) Boston bags are provided for the use of students while on duty.

(e) No exceptions can be made to the rules, and all students entering the Department must be prepared to observe both the letter and the spirit thereof.

7. Students will be required to cover the full period of practical work. If, for any reason, the work is interrupted, the period will be prolonged to cover the number of days lost.

8. No student will be required to repeat practical work which she has already covered under satisfactory conditions. She will receive credit for that, and, as far as time and opportunity allow, special work will be arranged. Nurses with adequate experience in public health work will not be required to do the full term of practical work. The time allowance granted will be settled separately for each student.

## ENTRANCE REQUIREMENTS FOR COURSE I

1. Applications for admission will be considered from the following classes of students:

- (a) The student who has obtained complete credit for Pass Matriculation.
- (b) The student who submits certificates other than those of Ontario which have been recognized by the University as equivalent in value to Pass Matriculation.
- (c) The student of mature age who has not complete Pass Matriculation or its equivalent. Such a student must submit with her application official statements with reference to her secondary and professional education.

2. In addition, all applicants must present evidence of certain professional training in nursing as follows: nurses from countries where registration is available must be eligible for registration; nurses from countries where registration is not available must submit a record of their hospital training for special consideration.

3. Students must not be more than 35 years of age when entering the Department.

## PART-TIME STUDENTS

Nurses wishing to take Course I. over a prolonged period may, under certain conditions, register for selected lecture courses in one year, and complete the work in a second year.

Nurses may register as occasional students for any one or more of the lecture courses in the regular curriculum if the class is not already overcrowded. If such occasional students meet the entrance standard of the Department, credit will be allowed for the work that they cover.

## STUDENTS WITH PREVIOUS PUBLIC HEALTH EXPERIENCE

It appears that nurses who have already been engaged in public health work are now seeking the special training which was not available in the past. If such students enter the Department, special care will be taken in planning their practical work. No student will be required to do field work which she has already covered under satisfactory conditions. She will receive credit for that, and as far as time and opportunity allow, specially selected work will be arranged to take its place.

This information applies to nurses who have been working with a visiting nurse association.

## FEES

The tuition fee for Course I is \$75 if paid in October. After October a penalty of \$1.00 a month will be imposed until the whole amount is paid.

A fee of \$2.00 must be paid by all students for the use of the University Library.

The fees for part time students will be:

For a course in any one subject for the Session.....	\$5.00
For a one term course (15 hours).....	\$3.00
For practice work.....	\$15.00
For special students for one term. . . . .	\$40.00

## EXPENSES

There is no University residence for the students of this Department. Board and lodging may be obtained in the vicinity of the College buildings from \$11.00 per week upwards.

The students must be prepared to meet a small expenditure for carfare while doing practical work.

Text books may be bought at the University Book Room. Copies of all prescribed text books will be kept in the University Library.

## SCHOLARSHIPS

A number of scholarships are available for the students in this Department during the year 1927-1928.

The Ontario Red Cross is offering one scholarship of \$350.00. Nurses interested in that offer should write to the office of that Society, 410 Sherbourne Street, Toronto 5.

The Victorian Order of Nurses is offering a small number of scholarships of \$400.00 each. These are only open to nurses undertaking to work with the Order after completing the course. For further information applicants should write to the Chief Superintendent, Victorian Order of Nurses, Jackson Building, Ottawa.

A few Nurses' Alumnæ Associations have also offered scholarships open to their own members.

## DIPLOMA AND EXAMINATIONS

A Diploma will be granted to all students who have completed the required work of the Department. Each student will be required (1) to do satisfactory class work throughout the year, (2) to receive a satisfactory report upon her practical work, and (3) to make the required pass mark upon the final examinations of the Department: 50 per cent. is required on each paper and 60 per cent. on the whole.

Supplemental examinations in the work of this Department will be held in September if necessary.

## COURSE II

Although this course includes only two years of work at the University, nevertheless it requires, before it can be completed, two years of study at the Training School for Nurses of the Toronto General Hospital. Therefore it is four years of study that the candidate is entering upon in registering for this work. These four years will be spent as follows:

- 1st year—University 8 months followed by,  
Hospital School for Nurses 4 months.
- 2nd year—Hospital School for Nurses 12 months.
- 3rd year—Hospital School for Nurses 10 months.
- 4th year—University 10 months.

The work of the four years will qualify the student for:

1. The Diploma of the School for Nurses of the Toronto General Hospital with eligibility for registration in the Province of Ontario.
2. The Diploma of Public Health Nursing from the University.

## CURRICULUM OF THE TWO YEARS' WORK AT THE UNIVERSITY

This outline is tentative and subject to change. It is expected that for the most part it will be followed as here outlined.

*First Year*

Biology. . . . Lectures and laboratory work—2 terms.

Physiology. . . Lectures and laboratory work—2 terms.

Physics

Chemistry. . . Lectures and laboratory work—2 terms.

English. . . . 1st year Honour Course—2 terms.

Psychology. . .

Pre-Hospital Courses

(a) History of Nursing.

(b) Dietetics.

(c) Possibly other subjects if required for admission to the special course at the Hospital.

*Final Year*

N.B.—This work will be divided from that outlined above for the first year by two full years of work at the Toronto General Hospital. Admission to this final year at the University will be conditioned upon (1) completion of the first year of University work just described, and (2) completion of the special two year course at the Toronto General Hospital.



Among others the following subjects will be offered:

- Preventive Medicine with a laboratory course in Bacteriology.
- Public Health Nursing.
- Teaching Methods.
- Social Science.
- School Hygiene.
- Nutrition and Dietetics.
- Certain Electives.

Practical work with public health nursing organizations will be arranged, corresponding closely with that now required in Course I.

### THE TWO YEAR COURSE AT THE TORONTO GENERAL HOSPITAL

This consists of 26 months, two of which will be allowed for holidays.

Theory—The regular lectures now required in the School for Nurses but omitting those already covered in the preliminary year as offered above by the University.

Practice—The following Hospital Services will be included:

Medicine.....	3 months
Surgery.....	2 months
Operating Room.....	2 months
Children's Wards.....	2 months
Communicable Diseases.....	2 months
Out-Patients' Department.....	1 month
Social Service Department.....	1 month
Obstetrics.....	2 months
Tuberculosis.....	2 months

For further particulars it will be necessary to consult the School for Nurses of the Toronto General Hospital.

### HOLIDAYS

A month's holiday will be arranged during the first summer either before or after starting work at the Hospital.

A month's holiday will be arranged during the second year at the Hospital.

During the third summer the work at the Hospital should be completed in July, allowing time for holidays before starting the fourth year of work which will probably begin at the University about the 1st of September. Students will be required to complete the full 26 months allotted to the Hospital, making up all time lost through illness, etc.

## HOSPITAL PROBATION

The School for Nurses of the Toronto General Hospital will receive the student upon probation during the first summer. Decision will be made as to the student's acceptability for hospital nursing before the 1st of September. If the student should not continue at the Hospital, she will then be free to proceed with some further University study without loss of time.

## ENTRANCE REQUIREMENTS FOR COURSE II

Applications for admission will be considered from the following class of students:

Those with complete junior matriculation with senior matriculation in at least two subjects, one of which shall be English. Candidates are recommended to include Science in their preparation for this course.

Only ten students will be admitted to this course this year.

## FEES FOR COURSE II

The tuition fee will be \$60.00 for each of the two years at the University.

A fee of \$2.00 must be paid each year for the use of the University Library.

For further particulars concerning tuition fees and other expenses at the Hospital it will be necessary to consult the School for Nurses of the Toronto General Hospital.

## EXPENSES

There is no University residence for the students of this Department. Board and lodging may be obtained in the vicinity of the College buildings from \$11.00 per week upwards.

The students must be prepared to meet a small expenditure for carfare while doing practical work.

Text books may be bought at the University Book Room. Copies of all prescribed text books will be kept in the University Library.

## INFORMATION OF INTEREST TO STUDENTS OF BOTH COURSES

### GENERAL INFORMATION

Application forms may be obtained by writing to the Secretary, the Department of Public Health Nursing, University of Toronto.

Candidates desiring admission to the Department, but uncertain as to their eligibility, should write personally to the Department for further information, addressing the Secretary. If possible a personal interview will be arranged. The office of the Department in the School of Hygiene is open during the summer months.

Applicants should understand that this work demands their full time for the whole of the academic year, and that it is quite impossible to take the full course and do any other professional work at the same time.

### PHYSICAL TRAINING

Classes in physical training for the women students of the University are given at the Household Science Building. These include gymnasium and swimming instruction. The students of the Department of Public Health Nursing are admitted to those classes upon payment of the usual fee of four dollars.

## EXTENSION COURSES

I. If there be sufficient demand a short Extension Course, two to three weeks in length, will be arranged annually for nurses with previous experience or training in public health work. Only a small registration fee is required for admission to that course and no special entrance standard beyond the professional qualifications stated above. No certificates are awarded.

The content of the Extension Courses will vary according to the demands of the applicants. It is hoped in this way to provide pioneer workers and early graduates of this Department with an opportunity for keeping their work up to date.

II. It is possible during the College year to arrange an Extension Course of weekly lectures upon some one subject of interest to the public health nurse, if the demand for any special subject be sufficient.

III. Lecturers will respond to requests from the Province if satisfactory arrangements can be made with the Department of University Extension.

Inquiries about the above courses may be addressed to the Secretary of the Department of Public Health Nursing, University of Toronto, or to the Secretary of the Department of University Extension.

## HOSPITAL PUPIL NURSES: EXTENSION COURSE IN PUBLIC HEALTH NURSING

A small amount of teaching in public health nursing is offered for the senior pupil nurses of the Toronto hospitals, the plan being to have each pupil receive one month of this instruction. This work is under the direction of the Department of University Extension, and it is in that Department that these students must register.

The objects of this work are as follows:

1. To give each pupil *some* personal contact with public health work, in order that she may realize that every nurse has opportunity and responsibility for certain preventive work.
2. To improve the hospital work of the pupil nurse by the better understanding she will have after working with patients in their own homes.
3. Vocational guidance for the pupil nurse.

The content of the teaching:

1. An explanation of the present activity in the field of preventive medicine, and particularly the nurse's share in that work, *i.e.*: public health nursing.
2. Daily practical work with public health nurses.

The schedule:

These students meet for class one hour every day for the first week, and after that approximately every other day. Apart from the hour in the class room, the day is spent with public health nurses at their work.

The class room teaching is made up of introductory and explanatory lectures upon the work that is being done, and conferences upon the work as the pupil experiences it.

So far the practical work has all been done with the Municipal Department of Public Health of Toronto and the Toronto Branch of the Victorian Order of Nurses.

If Nurses' Training Schools elsewhere in the Province are interested in obtaining this work for their pupils they should seek information from either this Department, or the Department of University Extension.

## TEXT BOOKS

The following is a partial list of the text books recommended for the use of the students in this Department:

- Chemistry of Food and Nutrition—Sherman.  
Child at School—Mackenzie.  
Child Hygiene—Baker.  
Children's Diseases for Nurses—Lucas.  
Evolution of Public Health Nursing—Brainard.  
Evolution and Significance of the Modern Public Health Campaign—  
Winslow.  
Feeding the Family—Rose.  
Health Education—Wood.  
Health Education in Rural Schools—Andress.  
Health Training in the Schools—Dansdill.  
Home and Community Hygiene—Broadhurst.  
Hygiene of the School Child—Terman.  
Industrial Nursing—Wright.  
Laws of Health and How to Teach Them—Winslow and Williamson.  
Life of Florence Nightingale—Cook.  
Mental Hygiene and the Public Health Nurse—Macdonald.  
Normal Child—Brown.  
Obstetrical Nursing—Von Blarcom.  
Ontario Public School Health Book—Fraser and Porter.  
Outline of the Practice of Preventive Medicine—Newman.  
Personal Hygiene for Nurses—Bunker and Turner.  
Practice of Preventive Medicine—FitzGerald.  
Pre-School Child—Gesell.  
Prospective Mother—Slemons.  
Public Health Nursing—Gardner.  
Social Philosophy of Carlyle and Ruskin—Rowe.  
Social Work in Hospitals—Cannon.  
Textbook of Simple Nursing Procedure for High Schools—Pope.  
What is Social Case Work—Richmond.

---

CURRICULUM IN LAW

---

## DEGREE OF BACHELOR OF LAWS

### NEW COURSE

The following curriculum for the degree of Bachelor of Laws came into force with the opening of the session 1925-1926, and all candidates entering upon the course for the degree after July 1st, 1925, must follow this curriculum; the former curriculum, which appears on page 5 will remain in force until June 30th, 1929, in order that candidates who have already obtained standing under this curriculum may complete the course for the degree.

### ENTRANCE

A candidate for the degree of Bachelor of Laws (LL.B.) must submit proof either (a) of having completed at least the First and Second years in the Faculty of Arts of this or a British or Canadian University or (b) of having been called to the Bar by the Law Society of Upper Canada.

Any person who has been admitted as a student-at-law by the Law Society of Upper Canada and who is a candidate for the Second Year examination as required by the Law Society may enter at the First Year.

The Senate may consider the application of any person who cannot comply with these conditions.

### FIRST YEAR

#### SUBJECTS IN THE FACULTY OF ARTS

1. ENGLISH CONSTITUTIONAL HISTORY: honour examination of the Second Year; (History 2g, p. 109).
2. ENGLISH CONSTITUTIONAL LAW: honour examination of the Third Year; (Law 3c, pp. 117, 118).
3. CANADIAN ADMINISTRATIVE AND MUNICIPAL LAW: honour examination of the Third Year; (Law 3d, p. 118).
4. HISTORY OF ENGLISH LAW: honour examination of the Third Year; (Law 3e, p. 117).
5. ROMAN LAW: honour examination of the Third Year; (Law 3b, p. 117).
6. JURISPRUDENCE: honour examination of the Fourth Year; (Law 4c, p. 118).
7. INTERNATIONAL LAW: honour examination of the Fourth Year; (Law 4d, p. 118).
8. CANADIAN CONSTITUTIONAL HISTORY: honour examination of the Fourth Year; (History 4f, p. 111).



9. CANADIAN CONSTITUTIONAL LAW: honour examination of the Fourth Year; (Law 4a, p. 118).

10. FEDERAL LAW AND INSTITUTIONS: honour examination of the Fourth Year; (Law 4b, p. 118).

The references are to the Calendar of the Faculty of Arts for the session 1927-1928.

A candidate may not present himself for the examination of the Second Year before he has completed the examination of the First Year.

## SECOND YEAR

### A. COMMON LAW

1. CRIMINAL LAW..... Kenny or Stephen; Kenny's Cases.
2. REAL PROPERTY..... Armour; Tudor's Cases.
- 3.\*HISTORY OF REAL PROPERTY LAW Digby.
4. CONTRACTS..... Anson; Kenny's Cases.
5. TORTS..... Salmond; Pollock; Kenny's Cases.
6. EQUITY..... Maitland; Smith.
7. PERSONAL PROPERTY..... Williams.

### B. CIVIL LAW

- 8.\*ROMAN LAW OF *Obligations*..... {Justinian; Gaius; Mackintosh's  
Roman Law of Sale.

## THIRD YEAR

- 1.\*MEDICAL JURISPRUDENCE..... Reese.

### A. COMMON LAW

2. COMMERCIAL LAW..... {Falconbridge, Sale, and Book II  
Banking.
3. CONFLICT OF LAWS..... Dickey or Westlake.
4. COMPANIES..... {Masten and Fraser; Robson and  
Hugg's Cases.
5. STATUTES..... Craies' Hardcastle.
6. EVIDENCE..... Stephen.
- 7.\*DOMESTIC RELATIONS..... Eversley, Parts 1, 2 and 3.

### B. CIVIL LAW

8. \*COMPARATIVE COMMON AND CIVIL  
LAW..... {Walton: Scope and Interpretation  
of the Civil Code.  
The Civil Code of Lower Canada—  
Book 3, Title 3, *Obligations* except  
Chap. IX dealing with *Proof*; Book  
3, Title 8, *Mandate*.

---

\*See first paragraph under heading of "Examinations" on page 852.

## C. THESIS

Each candidate for the degree of LL.B must present a thesis satisfactory to the examiners in Law, upon some subject embraced in the curriculum, on or before the 31st March in the year in which he presents himself for examination in his Fourth Year in Law, or on or before the said date in any subsequent year. The subject of the thesis will be prescribed by the Senate, and will be announced at least eight months before the date upon which it is due. An oral examination on the subject of the thesis may be required at the option of the examiners in Law. Candidates for the degree may defer presenting the thesis until a subsequent annual examination, in which case the fee for examination shall be \$10.

## EXAMINATIONS

Candidates must pass the examination set by the University in each subject marked with an asterisk; the University will grant credit in the subjects not so marked on the presentation of a certificate from the Law Society of Upper Canada showing that the candidate has passed the required examinations at the Osgoode Hall Law School.

The annual examinations shall be held in June.

A barrister may present himself for the subjects of examination of the Second and Third Years at the same annual examination.

## DEGREE OF BACHELOR OF LAWS

## OLD COURSE

The following curriculum for the degree of Bachelor of Laws will remain in force until June 30th, 1929, in order that candidates who have obtained standing under this curriculum may complete the course for the degree.

Candidates for the degree of LL.B. must have:

- (a) produced satisfactory certificates of conduct;
- (b) matriculated in the Faculty of Law;
- (c) passed the prescribed examinations;
- (d) attained the age of twenty-one years.

Any person having the degree of Bachelor of Arts or of Master of Arts in the University of Toronto; or any person having the degree of Bachelor of Arts or of Master of Arts of an approved University; or any person who has been admitted to the Bar by the Law Society of Upper Canada, may enter the Department of Law at the Third Year of the course of study in that Department; but prior to presenting himself for the final examination in the course of the degree of LL.B. he shall pass in addition to the examinations of the Third and Fourth Years in the Department of Law, the following examinations in the Faculty of Arts, viz.:—

1. ENGLISH CONSTITUTIONAL HISTORY: honour examination of the Second Year. (History, 2g, p. 100.)

2. ENGLISH CONSTITUTIONAL LAW: honour examination of the Third Year; (Law 3c, pp. 117, 118).

3. CANADIAN ADMINISTRATIVE AND MUNICIPAL LAW: honour examination of the Third Year; (Law 3d, p. 118).

4. ROMAN LAW: honour examination of the Third Year; (Law 3b, p. 117).

5. HISTORY OF ENGLISH LAW: honour examination of the Third Year; (Law 3a, p. 117).

6. Political Economy: honour examination of the Second Year; (Political Economy 2a, 2b, p. 113).

7. JURISPRUDENCE: honour examination of the Fourth Year; (Law 4c, p. 118).

8. INTERNATIONAL LAW: honour examination of the Fourth Year; (Law 4d, p. 118).

9. CANADIAN CONSTITUTIONAL HISTORY: honour examination of the Fourth Year; (History 4f, p. 111).

10. CANADIAN CONSTITUTIONAL LAW: honour examination of the Fourth Year; (Law 4a, p. 118).

11. FEDERAL LAW AND INSTITUTIONS: honour examination of the Fourth Year; (Law 4b, p. 118).

The references in Nos. 1-11 are to the Calendar of the Faculty of Arts, 1927-1928.

---

Any person who has been admitted as a student-at-law by the Law Society of Upper Canada and who is a candidate for the Second Year Examination as required by the Law Society may enter the Department of Law at the Third Year, but the results of his examination of the Third Year will be withheld pending the announcement by the Law Society of the results of the Second Year Examination. Such a candidate may present himself for examination in the prescribed Arts subjects during the Third and Fourth Years of the Law course.

Undergraduates in the Faculty of Arts, who intend to proceed to the degree of LL.B., may take these examinations either during their Arts course or during the Third and Fourth Years of their Law course.

#### MATRICULATION

The Matriculation examination in the Faculty of Law shall be identical with the examination of the First Year in the Undergraduate Pass Course: English; Latin; one of Greek, French, German, Hebrew, Italian or Spanish; a second optional language or Science; Algebra and Geometry; Ancient History or Trigonometry or Religious Knowledge.

## FIRST YEAR

The subjects of examination in the First Year in the Faculty of Law are as follows:—

(a) Subjects of the Pass Course in the Faculty of Arts in which Pass standing will be required:—

1. English of the Third Year.

2, 3. Any two of the following subjects of the Second Year, viz.:— Latin, Greek, French, German, Hebrew, Physics, Zoology, Botany, Chemistry, Geology of which one must be a language.

4. History of the Second Year.

5. Ethics of the Third Year.

6. History of Philosophy of the Third Year.

(b) Subjects of the Political Science Course, in which Honour standing will be required:—

1. English Constitutional History of the Second and Third Years.

2. English and Colonial Constitutional Law of the Third Year.

3. Political Economy of the Third Year.

4. History of English Law of the Third Year.

5. Roman Law of the Third Year.

## SECOND YEAR

The subjects of examination in the Second Year in the Faculty of Law shall be as follows, viz.:—

(a) Subjects of the Pass Course in the Faculty of Arts in which Pass standing will be required:—

1. English of the Fourth Year.

2, 3. Any two of the following languages of the Third Year:—Latin, Greek, French, German, Hebrew.

(b) Subjects of the Political Science Course, in which Honour standing will be required:—

1. Modern History of the Third Year.

2. Canadian Constitutional History of the Fourth Year.

3. Public Finance of the Fourth Year.

4. Political Philosophy of the Fourth Year.

5. Jurisprudence of the Fourth Year.

6. Public International Law of the Fourth Year.

7. Federal Constitutional Law of the Fourth Year.

## THIRD YEAR

- |   |                     |
|---|---------------------|
| 1. Common Law.....                          | Broom's Common Law. |
| 2. Personal Property.....                   | Williams.           |
| 3. History of the Law of Real Property..... | Digby.              |
| 4. Contracts.....                           | Anson.              |

- |  |  |
|--|--|
| 5. Law of Torts.....                     | { Salmond, English ed.<br>Pollock  |
| 6. Equity.....                           | { Maitland's Lectures on Equity.<br>Smith's Principles of Equity.                                    |
| 7. Roman Law of <i>Obligations</i> ..... | { Justinian, Institutes 3.13-4.5.<br>Caius, Institutes 3.88-3.225.<br>Mackintosh, Roman Law of Sale. |
| 8. Canadian Constitutional Law.          | Clement.   |

Additional subjects for candidates for the American Law Book Company's Prize:—

- |                              |   |
|------------------------------|---|
| 9. The Law of Companies..... | { Palmer's Company Law.<br>Robson and Hugg's Leading Cases<br>on Company Law. |
|------------------------------|---|

10. Municipal Corporation Law. The Powers of Municipal Corporations to make contracts, and the manner in which they may contract; the general principles governing the exercise of these powers to pass by-laws; and their powers to create or establish highways and their liabilities with respect to the same when created. The Municipal Act (R.S.O. 1914, c. 192); Meredith and Wilkinson's or Robson and Hugg's Municipal Manual; and Robson and Hugg's Leading Cases; so far as they relate to the named subjects.

Each candidate for the American Law Book Company's Prize must present a thesis upon some subject relating to either of the additional subjects on or before the 31st of March in the year in which he presents himself for examination in his Third Year in the Faculty of Law. The subject of the thesis for the Prize for 1928 is "The advantages and disadvantages from a legal point of view and otherwise of the government of cities by Commission under special Act, as compared with the present system under the Municipal Act".

#### FOURTH YEAR

- |                               |   |
|-------------------------------|---|
| 1. Medical Jurisprudence..... | Reese.  |
| 2. Law of Real Property.....  | Armour's Real Property.   |
| 3. Commercial Law.....        | { Chalmers' Sale of Goods, with<br>the Ontario Act of 1920.<br>Falconbridge's Banking and Bills<br>of Exchange, Book II.        |
| 4. Conflict of Laws.....      | { Dicey's Conflict of Laws, or<br>Westlake's Private International<br>Law.<br>Masten and Fraser's Canadian<br>Law of Companies. |
| 5. Law of Companies.....      | { Robson and Hugg's Leading<br>Cases on Company Law.  |

- |  |   |
|--|---|
| 6. Construction and Operation of Statutes..... | Craie's Hardcastle on Statutes.   |
| 7. Criminal Law.....                           | <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle; font-size: 3em; line-height: 1;">{</div> <div style="display: inline-block; vertical-align: middle;"> Harris's Criminal Law or<br/> Kenny's Outline of Criminal<br/> Law.<br/> Stephen's General View of the<br/> Criminal Law. </div> </div> |
| 8. Domestic Relations.....                     | Eversley, Parts 1, 2 and 3.   |

#### THESIS

Each candidate for the degree of LL.B., must present a thesis satisfactory to the examiners in Law, upon some subject embraced in the curriculum, on or before the 31st March in the year in which he presents himself for examination in his Fourth Year in the Faculty of Law, or on or before the said date in any subsequent year. The subject of the thesis will be prescribed by the Senate, and will be announced at least eight months before the date upon which it is due. An oral examination on the subject of the thesis may be required at the option of the examiners in Law. Candidates for the degree may defer presenting the thesis until a subsequent annual examination, in which case the fee for examination shall be \$10.

#### REGULATIONS

##### FEES

The following fees must be paid:—

For matriculation or entrance.....	\$10.00
For each examination after matriculation.....	10.00
For each supplemental examination.....	10.00
For the degree of LL.B.....	20.00
For admission <i>ad eundem gradum</i> , LL.B.....	20.00

A candidate will not be admitted to an examination unless he has paid all the fees due from him. A candidate who fails to pay his examination fees on or before the first of March—the last day for receiving fees prior to the Annual examination—must pay an additional fee of one dollar.

A candidate who fails to send his application for examination by the day appointed for receiving such applications must pay an additional fee of one dollar.

##### EXAMINATIONS

Every student who purposes presenting himself at any examination is required to send to the Registrar, not later than March 1st, a paper (according to a printed form which will be provided on application) stating his standing, and whether he is a candidate for Honours or otherwise.

Candidates who at any examination have failed in not more than two subjects may, with the consent of the Senate, present themselves for examination in such subjects at the next ensuing Supplemental examinations.

Undergraduates below the Fourth Year in the Faculty of Law, who have been rejected or who have been prevented from attending the annual examinations by sickness or other cause beyond their control, may, with the consent of the Senate, present themselves in September, at the time of the Supplemental examinations in Arts.

Candidates in the Faculty of Law shall not be required to pass an examination on those subjects in which they have already passed the required examination in the University of Toronto, or an equivalent examination in the course of studies prescribed by the Law Society of Upper Canada. Graduates in any Honour Course in the Faculty of Arts of this University shall not be required to pass an examination in Economics and in English Constitutional History.

Candidates who have taken the course at the Law School are required to present to the Registrar a certificate from the Secretary of the Law Society, showing the subjects in the Law School curriculum on which the candidate has passed examinations at the said school, and such certificates shall entitle the candidate to exemption from examination on the subjects mentioned in said certificate, where said subjects are included in the University curriculum in Law.

#### SUBJECT OF THESIS

The following is the subject for Thesis for candidates for LL.B. for the year 1928, viz.:—

"The scope and meaning of the legislative power under the headings of the British North America Act entitled *Marriage and Divorce* and *Solemnization of Marriage* with a comparison and definition of the federal and provincial authority in each field."

#### CERTIFICATES OF HONOUR

Certificates of Honour will be given at each examination to those students who have been placed in Honours. The fee for such certificates shall be one dollar.

#### STANDARDS

The standing for passing shall in the case of Arts subjects be fifty per cent., and in the case of the Law subjects be fifty per cent. on each subject of an examination, with an average of sixty per cent. on the whole. The standard for Honours shall be an average of seventy-five per cent. of the marks assigned to all the subjects of the Year.

#### WORKS OF REFERENCE

American and English Annotated Cases, American and English Encyclopædia of Law, Cyclopædia of Law and Procedure, Encyclopædia of Pleadings and Practice, Halsbury's Laws of England, the English and Empire Digest, Canada Supreme Court Reports with Notes and Annotations by E. R. Cameron, Encyclopædia of Forms and Precedents by Sir Arthur Underhill.

## DEGREE OF MASTER OF LAWS

Candidates for the said Degree must have been admitted to the Degree of Bachelor of Laws, must be of the standing of one year from admission to the Degree of Bachelor of Laws, must have presented a thesis satisfactory to the examiners in Law, and to the special examiners of such thesis appointed by the Senate, on some branch of law or of the history or philosophy of law, and must have passed the following examinations in the Faculty of Law, viz.:—

1. History of English Law: Holdsworth, *History of English Law*, Book I (Vol. I); Book IV, Part I (Vols. IV, V, VI) (latest edition); Holmes, *The Common Law*; Maitland, *Collected Papers*, Vol. III, pp. 210-404.

2. English Constitutional Law: An intensive study of the cases presented for LL.B. with special emphasis on Defence of the Realm Acts and on the growth of "administrative" law. Defence of the Realm Act Manual (last edition); Scott and Hildesley, *The Case of Requisition* (1920); Robinson, *Public Authorities and Legal Liability* (1926); Emden, *Principles of British Constitutional Law* (1925); The Civil Servant in the Law and the Constitution (1923); Blackwell, *The Law of Meetings* (1922); Dawson, *The Law of the Press* (1926) should be consulted, as well as reported cases and comment thereon since 1914 in the *Law Quarterly Review* and the *Journal of Comparative Legislation*.

3. Canadian Constitutional Law: Lefroy, *Canada's Federal System*; Lefroy and Kennedy, *Short Treatise on Canadian Constitutional Law*; Reported Cases and comment thereon in *The Canadian Law Times* and *The Canadian Bar Review* from 1917 to date.

4. Criminal Law: Kenny, *Outlines of Criminal Law* (last edition); Tremear, *Canadian Criminal Code Annotated*; Crankshaw, *Criminal Code of Canada and the Canada Evidence Act* (last edition).

5. International Law: A more intensive study of the course prescribed for LL.B. with special emphasis on the work and activities of the League of Nations.

6. Jurisprudence: Vinogradoff, *Historical Jurisprudence* (Introduction); Basu, *Modern Theories of Jurisprudence*; Cardozo, *The Nature of the Judicial Process*; MacIver, *The Modern State*; Kohler, *The Philosophy of Law*; Pound, *Introduction to the Philosophy of Law*; Interpretations of Legal History.

7. Roman Law: The *Lex Aquilia* compared with the present Common Law of Tort and Crime; Grueber, *The Lex Aquilia*.

8. Civil Code of Lower Canada and Roman-Dutch Law: Text of the French Civil Code, studied with reference to Beauchamp, *Civil Code Annotated of the Province of Quebec with French and English Texts* (last edition with supplement); Van Leeuwen, *Commentaries on Roman-Dutch Law* (Decker's edition with Kotze's annotations (last edition); Lee, *Introduction to Roman-Dutch Law* (last edition).



Candidates shall have the option of taking the examination in two groups—subjects 1 to 4 and subjects 5 to 8—the groups being taken in any years after the necessary LL.B. standing has been attained. The thesis may be presented in the year of the second examination or in any subsequent year. A candidate taking the eight subjects together, and failing, shall be awarded standing in the subjects in which he obtains the standard set for passing provided he secures the required percentage in not less than four of the eight subjects, the thesis being returned not read.

The thesis must be sent to the Registrar in typewritten or printed form, not later than the thirty-first day of March.

The Senate may appoint special examiners for the whole or any part of the work prescribed for examinations for said degree.

The fee for the said degree shall be thirty dollars (\$30.00).

## PRIZES

The Edward Thompson Company's Prize of the first twenty-five volumes of the American and English Annotated Cases will be awarded to that undergraduate of First Year standing who as a candidate for the examination of the Second Year submits the best thesis on some branch of the law of Personal Property, of Contracts or of Trusts. The subject for 1928 is "A study of the law of Trusts in relation to personal property".

The Canada Law Book Company's Prize of a set of Halsbury's Laws of England will be awarded to that graduate of this University who having completed his course in the department of Political Science, and having passed the First Year examination at Osgoode Hall, has written a thesis on some portion of the work prescribed in the first examination at Osgoode Hall. The subject for 1928 is "A comparative study of the constitutions of Canada and Australia".

The award of these two prizes shall be made to the candidate who obtains the highest aggregate number of marks on all the subjects of the second examination and also the highest number of marks for the thesis and is recommended for the Prize by the regular and special examiners in Law. The thesis shall be sent to the Registrar, in typewritten or printed form, not later than the thirty-first of October, signed by the candidate's pseudonym, and shall be submitted to the special examiners for adjudication and report to the Senate. The special examiners shall, before the day of examination, fix the maximum number of marks to be allowed, and the minimum number of marks which must be obtained on the thesis. In determining the merit and value of the thesis, the examiners shall attach special importance to the literary qualities, and to the amount of original thought, research and investigation, which have been shown by the candidate in his treatment of the subject of the thesis.

The American Law Book Company's Prize of a complete set of their *Cyclopædia of Law and Procedure* will be awarded to the successful candidate in the Third Year who shall have obtained the highest aggregate number of marks in all the subjects of examination prescribed in the curriculum for said year, and also in the additional subjects of the Law of Companies and Municipal Law, prescribed for the said Prize, including a thesis upon some subject relating to either of those two additional subjects, and who shall be recommended for said prize by the examiners in Law and by the special examiners appointed to examine the thesis submitted by such candidates.

The Edward Thompson Company's Prizes of the American and English *Encyclopædia of Law* and of the *Encyclopædia of Pleading and Practice* will be awarded to the candidates for LL.B. who shall have received the highest and second highest aggregate number of marks at the examination

for that degree in the Faculty of Law in all the subjects prescribed for the Fourth Year, including the thesis upon a legal subject, required of such candidates, and who shall be recommended for the Prizes by the examiners in Law, and the special examiners appointed to examine the thesis submitted by such candidates.

The American Law Book Company's Prize of a complete set of their Cyclopædia of Law and Procedure will be awarded to the successful candidate for LL.M. who shall have obtained the highest aggregate number of marks at the examination in subjects 5 to 8 for the said degree, including a thesis upon some branch of Law or of the history of philosophy of Law, and who shall be recommended for the said prize by the examiners in Law and by the special examiners to be appointed by the Senate to examine the theses submitted by such candidates.



CURRICULA AND REGULATIONS

FOR DEGREES AND DIPLOMAS IN

PHARMACY

AGRICULTURE

VETERINARY SCIENCE

PHYSICAL EDUCATION

# CURRICULUM IN PHARMACY

---

## DEGREE OF BACHELOR OF PHARMACY

This curriculum will remain in force only for the session 1927-1928 and will be replaced by a new curriculum extending over two years.

### MATRICULATION

Candidates for the degree of Bachelor of Pharmacy must either:—

1. Possess a degree in Arts (not an Honorary degree) from some recognized University; or
2. Have already matriculated in the Faculty of Arts in this or some other University in Canada; or
3. Be matriculants in the College of Physicians and Surgeons of Ontario.

Provided always that all candidates registered as apprentices of the Ontario College of Pharmacy, or who have received the diploma of the College of Pharmacy up to the first day of July, A.D. 1898, shall be admitted as matriculants in the Department of Pharmacy on payment of the registration fee of five dollars.

### REGULATIONS

Undergraduates (candidates for the degree) resident in the Province of Ontario must have complied with all the requirements prescribed from time to time by the Council of the Ontario College of Pharmacy for admission to examination for a diploma licensing to practise Pharmacy in Ontario, and must have received from the Registrar of the Ontario College of Pharmacy a certificate of having passed the final examination of that College.

Candidates for the degree, not resident in Ontario, must have devoted at least four years (not being engaged in any other business) to the study of Pharmacy, being apprenticed during that time to a regularly qualified Pharmaceutical Chemist; must have attended the full courses of lectures embracing all the subjects of the curriculum, the length of each course being not less than that required from time to time by the Council at the Ontario College of Pharmacy, and including practical work of some College of Pharmacy recognized by this University; the last of which courses must be taken at the Ontario College of Pharmacy.

All candidates who have, prior to August 15th, 1892, received the diploma of the Ontario College of Pharmacy will not be required to conform to the above, but will be allowed their degree on passing the examination on the subjects hereinafter given.

Notice is hereby given that after July 1st, 1926, the course for the degree of Bachelor of Pharmacy shall extend over a period of at least two years.

## EXAMINATIONS

Candidates for the degree must pass an examination to be held in the month of May of each year—hour and date of commencing to be hereafter given—must present to the Registrar satisfactory certificates covering all the requirements relating to undergraduates as given above, and of having passed the final examination of the Ontario College of Pharmacy.

The subjects of the examination shall be as follows:—

1. Botany and Microscopy.
2. Theory and Practice of Chemistry and Toxicology.
3. Materia Medica, including Posology and Pharmacognosy.
4. Theory and Practice of Pharmacy.
5. Interpretation of Prescriptions.
6. Practical Dispensing.

These examinations shall be partly written, partly oral and partly practical.

No candidate shall be considered as having passed the examination who has not obtained fifty per cent. of the marks allotted; nor shall a candidate be considered as having passed in any subject who has not obtained at least forty per cent. of the marks allotted to such subject.

## FEES

For matriculation or registration of matriculation.....	\$5.00
For annual examination (each).....	10.00
For each practical examination.....	0.50
For the degree of Phm.B.....	10.00

No fee shall be charged for transference from any Faculty of this University to the Department of Pharmacy.

## CURRICULUM IN AGRICULTURE

---

### DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURE

For many years students successfully completing the Two Year Course at the Ontario Agricultural College for the Associate Diploma, who obtained 50 per cent. general proficiency and 60 per cent. average in English subjects, were admitted to Third and Fourth Year Courses of study leading to the Degree of Bachelor of the Science of Agriculture. Commencing with the work of the First Year in the Session 1920-21 the Two Year Course for the Associate Diploma and the Four Year Course for the Degree of B.S.A. became entirely separate and distinct Courses. Applications for admission to the Course leading to the Degree will be considered on the basis of "Qualifications for Admission" stated below.

#### QUALIFICATIONS FOR ADMISSION

All candidates for admission to the Four Year Course leading to the Degree of B.S.A.

- (a) Must be eighteen years of age on or before the opening day of college.
- (b) Must produce satisfactory evidence as to moral character and physical ability.
- (c) Must produce certificate of having spent at least one year at work on a farm, and must have a practical knowledge of ordinary farm operations, such as harnessing and driving horses, plowing, harrowing, drilling, etc. When it is thought necessary, this knowledge will be tested by an examination at entrance or at any subsequent date.
- (d) Must submit to vaccination unless certificate of successful vaccination within two years is furnished.
- (e) Must pay in advance tuition fees and laboratory charges and make the required deposits on account of board, contingencies and other fees.
- (f) Must produce with application for entrance Ontario Pass Matriculation Certificate in Arts or Science except as defined in sub-sections 1 and 2 below.
  - (1) Credits of candidates whose education has been obtained outside of the Province of Ontario will be considered by special committee of the college staff.
  - (2) Candidates of mature age and extensive farm experience, but without Matriculation, may obtain admission to the Course leading to the degree by fulfilling the following conditions: (i) the completion



of the two year Associate Course, obtaining 40 per cent. in each subject of the second year with an average of 50 per cent. together with 60 per cent. in English; (ii) the completion of an Intermediate Year covering academic subjects exclusively, including English, Mathematics, Natural Sciences, and History. On the completion of the Intermediate Year such candidates will enter the Third Year of the Course leading to the degree.

All applications for admission *ad eundem statum* must be accompanied by official certificates of standing from the institutions where previous work has been done.

A student taking the Agriculture Option must have at least three years' practical farm experience before entering the Third Year.

A student taking the Dairy Option must have spent one season at practical work in each of three out of the following five: creamery, condensery, powder milk or city milk plant. A three months' Dairy School Course may be substituted for a season's experience in any one of the commercial plants.

#### FIRST YEAR

Agriculture—Animal Husbandry, Field Husbandry, Dairy Husbandry, Horticulture, Apiculture, Poultry, Agricultural Economics, Farm Engineering.

Bacteriology.

Botany.

Chemistry.

English.

Geology.

Mathematics.

Physics.

Zoology.

Physical Training.

#### SECOND YEAR

Agriculture—Animal Husbandry, Field Husbandry, Dairy Husbandry, Horticulture, Apiculture, Poultry, Farm Engineering, Agricultural Economics.

Bacteriology.

Botany.

Chemistry.

English.

Entomology.

Genetics.

Mathematics.

Physics.

Physical Training.

## INTERMEDIATE YEAR

(To be taken by students who have satisfactorily completed the first two years of the Associate Diploma Course and who wish to qualify for admission to the degree course.)

Bacteriology, Botany, Chemistry, English, Entomology, French, Genetics, History, Mathematics, Physics.

## THIRD AND FOURTH YEARS

One of the following Options:

1. General Agriculture
  - (a) Animal Husbandry
  - (b) Field Husbandry
2. Agricultural Science
3. Apiculture
4. Bacteriology
5. Botany
6. Chemistry
7. Dairy
8. Entomology
9. Horticulture

*Note.*—Students entering the Third Year shall select their option not later than the 1st of April in the Second or Intermediate Years, after consultation with the head of the department concerned.

## THESIS

Each Fourth Year student is required to prepare a Thesis on some branch of department of the work in his special course.

The subject of each thesis must be approved by the Professor in whose Department it is taken, and must be submitted to the head of the Department of English who is convener of the Thesis Committee on or before the first of April of the Third Year. All theses must be handed to the Registrar on or before the first of April of the Fourth Year. No student whose thesis is unsatisfactory will be permitted to write on the Fourth Year examinations. The thesis must be based on original work. It must be typewritten on letter-sized paper ( $8\frac{1}{2} \times 11$  inches) of good quality, and no corrections in writing must appear on the typewritten page. There must be a margin of one and a half inches on the left side of each page, and one inch on the other three sides, to allow for binding. Maps, charts, photographs, etc., must have one inch margin on the left side.

## EXAMINATIONS

## FIRST, SECOND AND THIRD YEARS

All First and Second Year students are required to pass two regular examinations during each year; one in December on the work of the fall term, and one in April on the work of the winter term, including classroom and laboratory work, experiments, etc. Third Year final examinations will be held in April. These examinations are conducted by the Ontario Agricultural College and are accepted by the University.

## FINAL FOR THE DEGREE

Examinations for the degree of B.S.A. are held annually by the University, at the close of the Fourth Year, in the month of May.

## SUPPLEMENTAL

Candidates for supplemental examinations must notify the Registrar in writing, at least two weeks before the dates fixed in the Calendar.

## FEES

Before writing the final examinations for the Degree of B.S.A. each candidate is required to pay the following fees to the Registrar of the College for transmission to the Bursar of the University—

Examination Fee.....	\$10.00
Degree Fee.....	10.00

The fee for a supplemental examination in the Final Year is \$10, payable to the Bursar of the University.

STANDARDS FOR PASS AND HONOURS IN THE FINAL  
EXAMINATIONS

First Class Honours.....	75%
Second Class Honours.....	66-74%
Third Class Honours.....	50-65%
Pass Standing.....	40%

Each student must obtain an average of 50% on all major subjects and 50% in term work.

# CURRICULUM IN VETERINARY SCIENCE

---

## DEGREE OF BACHELOR OF VETERINARY SCIENCE

The course leading to the Degree of Bachelor of Veterinary Science (B.V.Sc.), shall extend over a period of four academic years, of not less than seven months each.

### MATRICULATION

The standard adopted for the entrance requirement is based upon the successful completion, or the equivalent, of a high school course of four years in a Collegiate Institute, High School or Continuation School.

Candidates for admission to the Course in Veterinary Science must therefore, submit either—

1. A Normal Entrance or Junior Matriculation Certificate of Ontario.
2. A Certificate, equivalent in standard, of any Province of Canada, of any part of the British Empire, or of the United States of America.
3. Certificates other than those mentioned will be considered by the Senate in determining the status of applicants as undergraduates.
4. A Certificate of having passed a qualifying examination in English Composition, English Literature, British and Canadian History, Ancient History, Algebra, Geometry, Physics, and Chemistry, similar to the Normal Entrance examination of Ontario and represented in general by the Second Class Teacher's examinations of the Provinces of Canada.

To qualify for such a certificate candidates may present themselves at an examination centre in any Province of the Dominion at the time when the Department of Education of that Province holds its regular annual examinations, and at such other times and centres as may be approved by the Senate.

### ADMISSION TO ADVANCED STANDING

A student of a recognized veterinary college, or agricultural college, may be admitted to standing on conditions to be determined in each case by the Senate upon the report of the Ontario Veterinary College.

## CURRICULUM

Candidates for the Degree shall ordinarily complete the courses of instruction and examinations of the first, second and third years at the Ontario Veterinary College. The subjects of instruction and examination for the fourth year are as follows:

Veterinary Medicine and Surgery.  
Infectious and Contagious Diseases of Animals.  
Obstetrics and Hygiene of Breeding Animals.  
Veterinary Materia Medica and Therapeutics.  
Pathology.  
Bacteriology.  
Meat and Milk Hygiene.  
Veterinary Sanitary Service Laws and Regulations.

Examinations at the end of the fourth year shall be conducted by examiners appointed by and under regulations approved by the Senate.

The standard of passing shall be fifty per cent. in each subject with an average of sixty per cent. of the total number of marks assigned to the subjects.

The first class honour standard is seventy-five per cent. and the second class sixty per cent.

Any student failing in not more than three of the above subjects may take supplementary examinations in these subjects, and upon passing the same shall be entitled to receive the Degree.

Upon the successful passing of the examinations in the above subjects the students shall be entitled to receive the Degree of Bachelor of Veterinary Science (B.V.Sc.).

## DEGREE OF DOCTOR OF VETERINARY SCIENCE

The degree of Doctor of Veterinary Science is intended to be conferred under such conditions as will denote its receipt only by those distinguished for professional eminence.

A candidate for this degree shall be a graduate in Veterinary Science (B.V.Sc.) of the University of Toronto of at least three years' standing. He must present a thesis embodying the results of an original investigation conducted by himself on some subject approved by the Senate not later than the first of January.

The thesis must be based upon either:

- (a) The results of a special research.
- (b) The results of professional experience in a designated field allied to the live stock industry.

(c) The results of a special course of study extending over at least one year.

In order to be qualified for admission to the degree at the Annual Commencement in June, the thesis must be in the hands of the Registrar of the University not later than the first of May.

#### FEEs

*(Subject to change).*

Members of the graduating class will require to pay a fee of \$10.00 for examinations and the degree of Bachelor of Veterinary Science (B.V.Sc.). This fee is to be paid to the Bursar of the University before writing the final examinations. The fee for the degree of Doctor of Veterinary Science (D.V.Sc.) shall be \$15.00, which shall be paid on presentation of the thesis for the said Degree.

# CURRICULUM IN PHYSICAL EDUCATION

## DIPLOMA IN PHYSICAL EDUCATION FOR WOMEN

A diploma will be granted to women students registered in the University who shall have completed to the satisfaction of the Senate the prescribed courses in Physical Education.

It is recommended that students registering in the Diploma of Physical Education course should be registered in the Pass Arts course rather than in an Honour course.

Such students are requested to interview the Directress of Physical Education for Women before making their final selection of subjects in the Pass Arts course.

A student who fails to obtain 80% of the required practice periods in the Physical Training course throughout the session will not be permitted to attend the final examinations in the practical subjects.

The prescribed courses are as follows :

### FIRST YEAR

#### THEORY:

Elementary Physiology—A course of twenty lectures which will include a general account of the anatomy of the human body, and a discussion of the elementary principles of physiology.

Personal Hygiene—A course of ten lectures.

#### PRACTICE:

A course of three hours a week in the following subjects:—

General gymnastics, calisthenics, exercises with hand apparatus, marching tactics, apparatus, team and gymnasium games, dancing, technical and rhythmical exercises, national and folk dances.

#### SWIMMING:—

Elementary knowledge of back and breast strokes. (minimum 15 hours).

### SECOND YEAR

#### THEORY:

First Aid—fifteen lectures in the First Aid Course of the St. John Ambulance Association.

Gymnastic Kinesiology—A course of thirty lectures.

#### PRACTICE:

A course of four hours a week in the following subjects:—

General gymnastics, calisthenics, exercises with hand apparatus, marching tactics, team and gymnasium games, dances, a continuation of technical and rhythmical exercises, national and folk dances, practice teaching.

**SWIMMING:**

A further knowledge of standard strokes (back, breast, side, and crawl), diving. (minimum 15 hours.)

**THIRD YEAR**

**THEORY:**

General Hygiene—A course of twenty lectures.

Theory of Physical Education and Methods of Teaching, which will include a course of ten lectures.

History of Physical Education—ten lectures.

**PRACTICE:**

A course of four hours a week in the following subjects:

Advanced gymnastics, apparatus, athletic games, fencing, dancing, physical training leading to the Strathcona grade "B" certificate granted by the Department of Militia and Defence, practice teaching under supervision.

**SWIMMING:**

Fifty yards by each of the following strokes, back, breast, and side; advanced diving; life saving methods. (minimum 15 hours.)

**FOURTH YEAR**

**THEORY:**

Physiology of exercise—A course of ten lectures.

Anthropometry and prescription of exercise—ten lectures.

**PRACTICE:**

A course of four hours a week in the following subjects:—

Advanced gymnastics, corrective and remedial exercises, advanced apparatus work, mat exercises, athletic games, field hockey, tennis, field and track activities, dances, practice teaching under supervision.

**SWIMMING:**

Life saving, ornamental swimming, theory and practice of teaching (minimum 15 hours.).

**EQUIPMENT FOR WOMEN**

Each student is required to wear the regulation costume in the practice classes consisting of a short dark blue pleated skirt (knee length), white middie-blouse, black stockings, black running shoes, one piece bathing suit, head cap, and bath towel.

Each article to be distinctly marked with owner's surname.



## SPECIALIST'S CERTIFICATE IN PHYSICAL CULTURE

The Diploma for Women in Physical Education of the University of Toronto, granted in 1926 and thereafter, will be accepted by the Department of Education of Ontario as fulfilling the non-professional requirements for Specialist standing in Physical Education, provided that the holder of the diploma is also a graduate in Arts, and that she obtains in the examinations of her final year in Physical Education an average of 66%. Any person who meets the non-professional requirements stated above will be granted an Interim Specialist certificate in Physical Culture on completing at the Ontario College of Education, (i) the regular course for an Interim High School Assistant's certificate, and (ii) a course in Methods and Practice Teaching in Physical Culture.



---

FEDERATED AND AFFILIATED COLLEGES

---

## WYCLIFFE COLLEGE

Wycliffe College was founded in 1877 and incorporated in 1879. In 1885 it was affiliated with the University of Toronto, and federated in 1890 upon the proclamation of the Federation Act.

Its object is the Theological training of candidates for the ministry of the Church of England in Canada, and for the foreign missionary field.

In the University and University College its students receive instruction in the prescribed subjects of the Arts Course, as preliminary to the special study of Theology. The Theological course extends over a period of three years, and leads up to the degree of B.D., and D.D.

Part of the first year of the Theological Course may be taken concurrently with the Arts work of the University by means of the Theological options, and by following the schedule laid down in the Calendar of the College.

The first building of the College was erected in 1882. The work is now carried on in the second building erected in 1891, and added to in 1902, 1908, and in 1911, on the University Grounds and immediately adjoining Hart House. It contains rooms for 98 students, Convocation hall, lecture rooms, library, chapel, dining hall, etc.

Students are members of the Hart House, with its gymnasia and club rooms, and have all the privileges of the University.

THE FACULTY

REV. T. R. O'MEARA, D.D., LL.D., (*Principal*), *Professor of Practical Theology, Homiletics and Pastoral Theology.*

REV. DYSON HAGUE, M.A., D.D., *Professor of Liturgics.*

REV. W. E. TAYLOR, M.A., PH.D., *Professor of Ecclesiastical History and Apologetics.*

REV. C. V. PILCHER, M.A., D.D. (OXON.), *Professor of Old Testament Literature and Exegesis.*

REV. R. MERCER-WILSON, M.A., (T.C.D.), *Professor of Ecclesiology and Church History.*

REV. B. W. HORAN, M.A., B.D., (T.C.D.), *Professor of New Testament Literature and Exegesis.*

REV. T. W. ISHERWOOD, M.A. (OXON.), *Professor of Systematic Theology.*

REV. W. R. R. ARMITAGE, M.A., M.C., *Tutor.*

ALBERT HOLMES, ESQ., M.A., B.PAED., *Tutor.*

JOHN D. FALCONBRIDGE, ESQ., M.A., LL.B., *Honorary Lecturer in Canon Law.*

MIRIAM W. BROWN, *Lecturer in Reading and Voice Culture.*

*President and Chairman of the Council*

N. W. HOYLES, ESQ., B.A., K.C., LL.D.,

*Representatives on the University Senate*

THE PRINCIPAL, N. W. HOYLES, ESQ., B.A., K.C., LL.D.

J. D. FALCONBRIDGE, ESQ., M.A., LL.B., K.C.

*Secretary to the Faculty*

REV. W. E. TAYLOR, M.A., PH.D.

*Dean of Residence*

REV. B. W. HORAN, M.A., B.D.

*Librarian*

REV. B. W. HORAN, M.A., B.D.

*Bursar and Registrar*

H. MORTIMER, ESQ., C.A.

## KNOX COLLEGE

Knox College was established at Toronto in 1844, as a theological seminary in connection with the Synod of the Presbyterian Church of Canada (Free Church), which had been organized in the same year. In 1858 it was incorporated by Act of Parliament. In 1861, in consequence of the union of the Synod of the Free Church and that of the United Presbyterian Church, as the Synod of the Canada Presbyterian Church, Knox College and the Theological Institute of the United Presbyterian Synod were united. Since the Union of 1875 Knox has been a College of the Presbyterian Church.

After several changes of location the buildings on Spadina Avenue were erected in 1875 and were occupied until 1914 when the College moved to the beautiful new buildings facing on the University lawn. Knox College was affiliated with the University of Toronto in 1885, and federated in 1890, upon the proclamation of the Federation Act. In the University and University College such of its students as are not proceeding to a degree receive instruction during three sessions in English, Latin, Greek, History, Logic, Mathematics, Chemistry, Biology, Physics, Psychology, Mental and Moral Philosophy and Hebrew. The Regular University Course leading to the degree of B.A. is the preparation expected of entrants in Theology. The course in Theology extends over three years. In addition to the required course, a special course of study leads to the degree of B.D. A number of scholarships and prizes are offered for competition in each year. Certain Religious Knowledge options may be taken by students of the University in any year of their course, and Theological options taken in the Third and Fourth years may be counted as part of the regular course in Theology. Courses of study in the New Testament are provided in Knox College for every year of the Undergraduate course, and may be taken as Religious Knowledge options for the University degree.

The College is governed by "The Board of Management": Mr. C. S. McDonald, Chairman; Rev. J. W. MacNamara, B.D., Secretary; The Treasurer of the Presbyterian Church is the Treasurer of Knox College. The "Board" is appointed annually by the General Assembly of the Presbyterian Church.

THE FACULTY

REV. THOMAS EAKIN, M.A., PH.D., D.D., *Principal, Professor of Practical Theology and interim Professor of Old Testament Literature and Exegesis.*

REV. J. D. CUNNINGHAM, *Professor of New Testament Literature and Exegesis.*

REV. E. LLOYD MORROW, M.A., B.D., PH.D., *Professor of Systematic Theology.*

REV. W. W. BRYDEN, M.A., *Professor of Church History and the History and Philosophy of Religion.*

## VICTORIA UNIVERSITY

## FACULTY OF THEOLOGY

The Faculty of Theology in Victoria College was established in 1871 for the purpose of training candidates for the ministry of the Methodist Church. Its classes and degrees have, however, always been open to candidates for the ministry in any Christian Church, and are now open to members in good standing in any such Church.

Instruction is provided in the various courses of study leading up to ordination in the United Church of Canada, viz., the B.D. Course, the Course for Graduates in Arts, and the Course for Non-graduates. An arrangement has been entered into with Union Theological College (formerly Knox College) for full co-operation in the work of instruction.

Undergraduates in Arts, whether candidates for the ministry or not, have the privilege of taking certain subjects in Theology as options in Religious Knowledge in the several years of their course, as indicated in this Calendar in the prescriptions of the Arts Courses.

For further information as to courses of study, fees, honours, prizes, scholarships and regulations, see the Theological Calendar of Victoria and Union Colleges, or apply to the Rev. Professor J. F. McLaughlin, B.A., D.D., Dean of the Faculty of Theology.

## THE FACULTY

- REV. F. H. WALLACE, M.A., D.D., *Professor Emeritus.*  
 REV. J. F. McLAUGHLIN, B.A., D.D., *Professor of Old Testament Exegesis and Literature.*  
 REV. R. P. BOWLES, M.A., D.D., LL.D., *Professor of Systematic Theology.*  
 W. B. LANE, M.A., Ph.D., *Professor of Ethics and Didactics.*  
 REV. W. H. GREAVES, M.A., *Professor of Public Speaking.*  
 REV. A. J. JOHNSTON, B.A., D.D., *Professor of Homiletics and Pastoral Theology and of Church History.*  
 REV. J. W. MACMILLAN, B.A., D.D., *Professor of Sociology.*  
 REV. J. H. MICHAEL, M.A., *Professor of New Testament Exegesis and Literature.*  
 REV. W. A. POTTER, M.A., B.D., *Professor of Old Testament Exegesis and Literature.*  
 REV. F. W. LANGFORD, B.A., M.R.E., *Professor of Religious Pedagogy.*  
 W. T. BROWN, M.A., Ph.D., *Professor of Ethics and Apologetics.*  
 REV. F. L. BARBER, M.A., Ph.D., *Special Lecturer in History of Preaching.*



## ONTARIO COLLEGE OF PHARMACY

The Council of the College of Pharmacy, the biennially-elected governing body of the practising pharmacists of the Province of Ontario, began in 1882 to give instruction in the various subjects necessary for license for pharmaceutical chemists. The College Building, situated in St. James Square, was erected in 1886, and the Faculty reorganized and extensive additions made to the building in 1891. In the same year affiliation was entered into with the University of Toronto. For curriculum, see p. 864. For details as to laboratory and other courses, preliminary qualifications, etc., see Annual Announcement of the College, which may be had by addressing J. F. Roberts, Registrar-Treasurer, Ontario College of Pharmacy, Toronto, Ontario.

## THE FACULTY

## SCHOOL TEACHING STAFF

CHARLES F. HEEBNER, PH.G., PHM.B., F.C.I.C., *Dean, Professor of Pharmacy and Dispensing.*

PAUL L. SCOTT, M.B., *Professor of Biology and Materia Medica.*

R. O. HURST, PHM.B., *Associate Professor of Materia Medica and Pharmacy.*

## UNIVERSITY TEACHING STAFF

F. B. ALLAN, M.A., PH.D., *Professor of Organic Chemistry.*

F. B. KENRICK, M.A., PH.D., *Professor of Chemistry.*

V. E. HENDERSON, B.A., M.B., *Professor of Pharmacology.*

J. H. FAULL, B.A., PH.D., *Professor of Botany.*

L. J. ROGERS, B.A.Sc., M.A., *Associate Professor of Chemistry.*

H. B. SIFTON, B.A., PH.D., *Assistant Professor of Botany.*

F. LORRIMAN, M.A., PH.D., *Lecturer in Chemistry.*

## ONTARIO AGRICULTURAL COLLEGE

1926-1927

## ADMINISTRATIVE OFFICERS

- J. B. REYNOLDS, M.A., *President*.  
 S. SPRINGER, *Bursar*.  
 A. M. PORTER, B.S.A., *Registrar*.  
 MARGARET I. ODROSKIE, *President's Secretary*.  
 E. H. CARRARD, B.S.A., *Dean of Residence*.  
 ANNIE O. HALLETT, *Librarian*.  
 GERTRUDE M. HILBORN, *Assistant Librarian*.  
 DR. ANNIE ROSS, *Matron*.  
 HELEN E. McMULLEN, *Dietitian*.  
 KATHERINE BECK, *Assistant Dietitian*.  
 MRS. K. T. FULLER, *Superintendent Macdonald Hall*.

## FACULTY OF INSTRUCTION AND LABORATORY STAFF

- J. B. REYNOLDS, M.A., *President*.  
 H. H. DEAN, B.S.A., *Professor of Dairy Husbandry*.  
 R. HARCOURT, B.S.A., *Professor of Chemistry*.  
 W. R. GRAHAM, B.S.A., *Professor of Poultry Husbandry*.  
 J. E. HOWITT, M.S.A., *Professor of Botany*.  
 D. H. JONES, B.S.A., *Professor of Bacteriology*.  
 O. J. STEVENSON, M.A., D.PAED., *Professor of English*.  
 WADE TOOLE, B.S.A., M.S., *Professor of Animal Husbandry*.  
 F. E. MILLEN, B.S.A., *Professor of Apiculture*.  
 W. C. BLACKWOOD, B.A.Sc., *Professor of Agricultural Engineering*.  
 A. LEITCH, B.S.A., *Professor of Economics*.  
 OLIVE CRUIKSEANK, B.A., *Director of Home Economics*.  
 L. CAESAR, B.A., B.S.A., *Professor of Economic Entomology*.  
 A. H. MACLENNAN, B.S.A., *Professor of Horticulture*.  
 A. W. BAKER, B.S.A., *Professor of Entomology*.  
 F. N. MARCELLUS, B.S.A., B.V.Sc., V.S., *Professor of Poultry Husbandry*.  
 J. W. MACARTHUR, M.A., Ph.D., *Professor of Genetics*.  
 W. J. SQUIRRELL, B.S.A., *Professor of Field Husbandry*.  
 G. H. UNWIN, B.A., B.S.A., *Associate Professor of English*.  
 H. L. FULMER, B.S.A., M.A., *Associate Professor of Chemistry*.  
 R. E. STONE, B.Sc., Ph.D., *Associate Professor of Botany*.  
 A. L. GIBSON, N.D.A., N.D.D., B.S.A., *Associate Professor of Chemistry*.  
 J. C. STECKLEY, B.S.A., *Associate Professor of Animal Husbandry*.  
 R. R. GRAHAM, B.A., B.S.A., *Associate Professor of Physics*.

- A. H. TOMLINSON, B.S.A., *Associate Professor of Horticulture.*  
 R. G. KNOX, B.S.A., *Associate Professor of Animal Husbandry.*  
 A. DAVEY, B.S.A., *Associate Professor of Bacteriology.*  
 ANNIE ROSS, M.D., C.M., *Instructor in Physiology, Home Nursing and Psychology.*  
 E. W. KENDALL, B.S.A., *Associate Professor of Agricultural Engineering.*  
 R. C. MOFFATT, M.A., *Lecturer in Physics.*  
 F. L. FERGUSON, B.S.A., *Lecturer in Physics.*  
 J. COKE, B.S.A., M.S., *Lecturer in Agricultural Economics.*  
 W. H. SPROULE, B.S.A., *Lecturer in Dairy Husbandry.*  
 A. C. WHEATLEY, B.A., *Lecturer in Chemistry.*  
 E. C. MCLEAN, M.A., *Lecturer in English.*  
 O. MCCONKEY, B.S.A., M.S., *Lecturer in Field Husbandry.*  
 D. R. SANDS, B.S.A., M.S., *Lecturer in Botany.*  
 D. A. KIMBALL, B.S.A., *Lecturer in Horticulture.*  
 G. E. RAITHEY, B.S.A., *Lecturer in Animal Husbandry.*  
 JEAN RODDICK, *Instructor in Household Science.*  
 MAYME C. KAY, M.A., *Instructor in Normal and Extension Methods.*  
 KATHERINE B. DOUGHTY, B.S., *Instructor in Domestic Art.*  
 JEAN C. BRADLEY, B.S., *Instructor in Foods and Nutrition.*  
 E. S. SNYDER, B.S.A., M.S., *Lecturer in Poultry.*  
 S. WATERMAN, B.S.A., *Lecturer in Chemistry.*  
 J. A. FLOCK, B.S.A., *Lecturer in Entomology.*  
 D. B. SHUTT, B.S.A., *Lecturer in Bacteriology.*  
 E. C. STILLWELL, B.S.A., M.S., *Lecturer in charge of Meat Research.*  
 BELLA MILLAR, *Specialist in Dairying.*  
 W. G. EVANS, B.S.A., M.S., *Demonstrator in Botany.*  
 G. L. JARVIS, B.S.A., *Demonstrator in Apiculture.*  
 H. A. SMALLFIELD, B.S.A., M.S., *Demonstrator in Dairying.*  
 T. J. MCKINNEY, *Specialist in Dairying.*  
 MARGARET REID, B.S., *Instructor in Household Administration.*  
 E. J. DYCE, B.S.A., *Demonstrator in Apiculture.*  
 W. J. B. KAY, B.S.A., *Demonstrator in Horticulture.*  
 WINNIFRED A. SCHNECK, B.S., *Assistant Instructor in Domestic Art.*  
 OLIVE M. DOBBYN, Ph.B., *Instructor in Laundry and Household Administration.*  
 R. H. OZBURN, B.S.A., *Demonstrator in Entomology.*  
 F. W. HAMILTON, B.S.A., *Demonstrator in Dairying.*  
 P. B. SANDERS, B.S.A., *Campus Superintendent.*  
 E. H. GARRARD, B.S.A., *Instructor in English.*  
 KATHLEEN K. PEPLER, *Instructor in Drill and Gymnastics (Macdonald Institute).*  
 D. F. ADAMS, B.S.A., *Physical Instructor (O.A.C.).*  
 E. WEBB, B.S.A., *Demonstrator in Agricultural Engineering.*  
 O. A. LEMIEUX, B.S.A., *Fellow in Chemistry.*

## RESEARCH STAFF

## CHEMISTRY

W. D. MACFARLANE, N.D.A., N.D.D., B.S.A., *Analyst*.

## AGRICULTURAL ECONOMICS

J. B. HOODLESS, B.S.A., *Research Assistant in Marketing*.

C. W. RILEY, B.S.A., *Assistant in Cost Accounting*.

W. S. ROWE, W. J. FAIRWEATHER, G. H. EDWARDS, B.S.A., *Enumerators*.

## FIELD HUSBANDRY

A. W. MASON, B.S.A., *Assistant Experimentalist*.

A. E. WHITESIDE, *Assistant in Plant Selection*.

R. KEEGAN, B.S.A., *Assistant in Plant Breeding*.

## BAKING SCHOOL

R. HARCOURT, B.S.A., *Director*.

H. C. MAEDEL, B.A.Sc., *Assistant Director*.

M. ALICE PURDY, *Specialist in Flour Testing*.

MARY A. CHILD, *Assistant in Flour Testing*.

## EXTENSION STAFF

LIONEL STEVENSON, B.S.A., M.S., B.V.Sc., V.S., *Director of Extension*.

J. BUCHANAN, B.S.A., *Field Husbandry*.

J. F. FRANCIS, B.S.A., *Poultry Husbandry*.

V. C. LOWELL, B.S.A., *District Supervisor of Drainage*.

W. P. SHOREY, B.S.A., *District Supervisor of Drainage*.

A. G. RICHMOND, B.S.A., *Vegetable Extension Specialist*.

## TEMPORARY STAFF

## CHEMISTRY

G. N. RUHNKE, B.S.A., *Soil Surveys*.

N. J. THOMAS, B.S.A., *Soil Surveys*.

## DAIRY SCHOOL

## January—March

A. P. CLARKE, B.S.A., *Milk and Cream Testing*.

C. E. LACKNER, B.S.A., *Cream Separators*.

D. McMILLAN, B.S.A., *Buttermaking*.

## POULTRY

F. RICHARDSON, B.S.A.

## THE ONTARIO VETERINARY COLLEGE

In 1862, through the efforts of the late Hon. Adam Fergusson of Woodhill and the late George Buckland, Professor of Agriculture in the University of Toronto, Professor Andrew Smith, a graduate of the Edinburgh Veterinary College, was appointed to give instruction in Veterinary Studies in the Province of Upper Canada. The Veterinary College thus established was later taken over by the Government of the Province of Ontario and affiliated with the University of Toronto, from which graduates of the College may receive the degree of Bachelor of Veterinary Science and Doctor of Veterinary Science. See Curriculum in Veterinary Science elsewhere in this volume.

## COLLEGE STAFF AND SUBJECTS TAUGHT, 1926-1927.

- C. D. MCGILVERAY, M.D.V., D.V.Sc., *Contagious Diseases, Sanitary Service.*  
J. N. PRINGLE, M.R.C.V.S., B.V.Sc., *Sporadic Diseases, Physiology.*  
R. A. MCINTOSH, M.D.V., *Obstetrics, Special Therapeutics.*  
W. J. R. FOWLER, B.V.Sc., *Surgery, Materia Medica.*  
H. D. NELSON, D.V.Sc., *Anatomy.*  
F. W. SCHOFIELD, D.V.Sc., *Pathology, Parasitology.*  
H. E. BATT, B.V.Sc., *Histology, Meat Inspection.*  
R. GWATKIN, D.V.Sc., *Bacteriology, Milk Hygiene.*  
L. STEVENSON, B.S.A., M.Sc., *Physiology.*  
J. G. HARVEY, B.V.Sc., *Canine Diseases.*  
A. DUNBAR, *Jurisprudence.*  
R. HARCOURT, B.S.A., *Ontario Agricultural College, Chemistry.*  
W. TOOLE, B.S.A., *Ontario Agricultural College, Animal Husbandry.*  
J. E. HOWITT, M.S.A., *Ontario Agricultural College, Botany.*  
O. J. STEVENSON, M.A., D.PAED., *Ontario Agricultural College, English and Public Speaking.*  
A. LEITCH, B.S.A., *Civics, Economics.*



---

## APPENDIX

---

## REGISTER OF STUDENTS, 1926-1927

## FACULTY OF ARTS

## FIRST YEAR

C—University College; V—Victoria College; T—Trinity College;  
M—St. Michael's College.

College Name	Home Address	College Name	Home Address
C Abbott, A. L.	Toronto	C Bell, L. R.	Toronto
C Abernethy, R. M.	Vancouver, B.C.	M Bell, Miss M. R.	Toronto
C Adams, R. A.	Hamilton	V Bennett, C. E.	Meaford
C Addison, W. G.	Toronto	C Bennett, W. D.	Toronto
C Aitken, Miss M. A.	Toronto	C Bernstein, L.	Toronto
C Allan, W. K.	Stouffville	C Berry, Miss D. F.	Toronto
C Allen, Miss C. E.	Toronto	V Bicknell, Miss A. C.	Brantford
C Allen, F. L. J.	Toronto	V Bicknell, Miss M. M.	Brantford
C Almas, Miss L. M.	Hagersville	T Bilbrough, W. H.	Toronto
V Annis, C. A.	Pickering	V Black, J. R.	Bexley
C Apps, W. P.	Brantford	C Blackwell, Miss E. J.	Toronto
C Armour, Miss M. E.	Toronto	C Blumenthal, Miss S.	Toronto
V Armstrong, C. A.	Toronto	C Bochner, M. F.	Toronto
C Arnold, E. G.	Toronto	C Boddy, A. L.	Toronto
C Arnold, W. F.	Toronto	M Bolan, M. M.	Midland
V Ashbourne, Miss L. E.	Toronto	T Bonis, Miss M. E.	St. Mary's
V Atkinson, W. H.	Hamilton	T Bonycastle, Miss D. K.	Bowmanville
T Auld, G. E.	Hamilton		
V Auld, Miss J. A.	Beamsville	T*Boothe, F. P.	Toronto
C Ayers, W. J.	Toronto	C Bowen, J. W.	Toronto
M Baigent, R. R.	Toronto	C Bowes, Miss M. L.	Toronto
T Baker, H. D.	Toronto	C Bowles, Miss V. M.	Bradford
V Balfour, A. T.	Regina, Sask	C Boyd, C. G.	Creemore
C Ballachey, Miss M. I.	Toronto	C Boyd, M. M.	Toronto
V Ballagh, H.	Teeswater	V Boyle, S. W.	Brampton
C Banfield, Miss A. M.	Toronto	V Braham, J. K.	Toronto
C Barber, G. R.	Regina, Sask	C Brebner, F. R.	Toronto
V Barker, L. R.	York Mills	M Breen, E. T.	Rideau Lake
T Barlow, C. O.	Toronto	C Breslin, Miss J.	Toronto
C Barlow, Miss W. E.	Havelock	T Brett, Miss S. A. M.	Rosemont
T Barnard, Miss D. T.	Toronto	T Brewster, Miss M. C.	Hespeler
V Barnard, J. G.	South Woodslee	V Bricker, Miss A. E.	Kitchener
C Barrett, H. O.	Toronto	C Brien, F. S.	Windsor
C Bartlett, J. A.	Toronto	V Bright, J. R. A.	Toronto
M Bassett, B. B.	Petrolia	V Brinkman, Miss R. B.	Smith's Falls
V Beacom, C. E.	Kingsville	V Britton, J. C.	Clinton
V Beal, Miss H. S.	Toronto	T Brooks, E. A.	St. Catharines
C Beamish, B. D.	Toronto	T Brooks, Miss G. E.	Toronto
C Bean, W. A.	Kitchener	V Brooks, W. H.	Shelburne
C Beatson, Miss V. R.	Toronto	C Brooks-Hill, F. B.	Toronto
V Beattie, Miss M. E.	St. Catharines	V Brown, P. C.	Pefferlaw
V Beavers, G. E.	Exeter	V Brown, R. D.	Norwood
C Beckett, Miss M. F. F.	Toronto	C Browne, C. E.	Espanola
V Bell, Miss A. M.	Toronto	V Buchanan, D. W.	Lethbridge, Alta
C Bell, H. B.	Toronto	C Buchanan, W. W.	Guelph

\*Michaelmas Term.



College Name	Home Address	College Name	Home Address
C Buckingham, Miss E. A.	Guelph	C Cook, A. E.	Toronto
T Buckland, G. H.	Toronto	V Cook, Miss M. D.	Tillsonburg
V Buchner, W. R.	Delhi	C Cook, Miss M. S.	Toronto
M Bulger, J. F.	Eganville	M Cooney, Miss E. F.	Toronto
C Burgess, R. B.	Toronto	C Copeland, W. H.	Elmvale
V Burgess, R. T.	Toronto	C Copp, Miss M. E.	Toronto
V Burnett, Miss D. C.	Toronto	C Copus, D. S.	Stratford
V Burns, N. M.	Toronto	M Corbett, J.	Toronto
C Burton, F. W.	Weston	M Costello, Miss D. M.	Toronto
C Butler, N. E.	Prince Albert, Sask	C Coulthard, Miss I. M. E.	Toronto
M Calnan, T. J.	Vernonville	V Cowan, R. A.	Orono
T Calow, Miss A. M.	Toronto	V Cowie, Miss J. I.	Acton
C Cameron, J. W.	Toronto	C Coxe, Miss H. C.	Acton
C Campbell, Miss E. R.	Toronto	C Craig, J. A. D.	Toronto
C Campbell, J.	Toronto	V Craw, Miss E. M. E.	Lucknow
M Campbell, Miss Margaret A.	Palgrave	M Crean, Miss M. E.	Toronto
C Campbell, Miss Mary A.	Toronto	C Crocker, B. F.	Toronto
C Campbell, R. R.	Toronto	T Crosthwait, T.	Toronto
T Camsell, Miss I. D.	Ottawa	C Cuddy, Miss E. A. B.	Amherstburg
C Capp, H. E.	Toronto	T Cummings, W. A.	Toronto
T Carpenter, W.	Toronto	C Curry, H. W.	Bradford
V Carrington, A.	Weston	C Curtis, Miss L.	Toronto
V Carson, Miss E. E.	Bridgeburg	C Dale, Miss F. F.	St. Mary's
V Carson, M. J. D.	Donville	C Dalrymple, Miss M. J.	Dunnville
T Case, P. M.	Exeter	C Daniell, J. E.	Toronto
C Chalmers, I. K.	Toronto	C Dankowich, J. M.	Toronto
T Chalykoff, Miss N.	Hearst	V Davey, R. R. B.	Chesley
C Chamandy, E. N.	Toronto	C Davidovitz, B.	Hamilton
C Chapman, Miss A. L.	Vernon, B.C	C Davidson, I. W.	Brampton
T Chapple, F. D.	Chapleau	C Davidson, R.	Port Dover
C Charlton, Miss M. E.	Toronto	C Davies, Miss D. M.	Toronto
T Chudleigh, M. M.	Toronto	C Davies, F. M.	Toronto
M Clancy, J. J.	Toronto	V Davis, Miss A. L.	Toronto
C Clark, W. S.	Toronto	C Dawson, J. C. C.	Toronto
V Clarke, J. F.	Toronto	C Dawson, L. C.	Toronto
C Clarke, Miss M. A.	Palmerston	V Day, Miss H. T.	Guelph
C Clarke, R. H. W.	Nassau, B.W.I	C*Daymond, F.	Fergus
C Clarke V. W.	Port Credit	C Deering, H. R.	Windsor
C Cleland, Miss I. E.	Toronto	C Deeth, J. H.	Toronto
T Clough, J. C.	Toronto	T Defries, J. G.	Toronto
C Cockburn, Miss J. S.	Toronto	C Delafield, C. R.	Windsor
C*Cogan, Miss P. O.	Colorado Springs, Col	V Demary, Miss V. A.	Toronto
V Colling, Miss M. I.	Bancroft	C Dennis, R. L.	Toronto
V Collingwood, H. G.	Exeter	C*Denoon, A. H.	New Glasgow, N.S.
C Collingwood, L. H.	Newmarket	V Dew, Miss D. M.	King City
C Collins, E.	Toronto	V DeWitt, N. J.	Toronto
V Colquette, W. E.	Toronto	C Dibbon, W. L.	Toronto
C Colvin, J. R.	Toronto	T Dickinson, Miss M. L. J.	Kenora
C Colvin, Miss M. T.	Toronto	C Dinnick, Miss C. L.	Toronto
C Conboy, Miss E. S.	Toronto	C Dixon, Miss M. L.	Toronto
C Connolly, Miss M. M.	Watford	C Dobrindt, H. S.	Jordan
C Connor, Miss A. K.	Ottawa	C*Downer, A. W.	Egbert
C Connor, W. G.	Belleville	M Downey, Miss M. H.	Toronto
		V Dowsett, Miss D. E.	South Porcupine

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
M Drago, Miss E. G.	Niagara Falls	C Gallaher, Miss L. H.	Ottawa
C Drury, H. A.	Toronto	V Gamble, F. B.	Dundas
C Dunlap, J. C.	Pembroke	V Gammell, J. B.	Brampton
M Dunn, Miss G. C.	Toronto	V Garland, Miss S. B.	Cobourg
T Dunn, Miss M. E. G.	Port Colborne	C Garrow, Miss H. E.	Toronto
C Durnan, Miss M. H.	Toronto	C Garwood, Miss D. S.	Niagara Falls
V Dutton, Miss D. I.	Guelph	M Gavin, T. A.	Toronto
C Dyment, Miss F. I.	West Flamboro	C Gelber, L. M.	Toronto
V Eagle, F. C.	Hamilton	C Gemmer, W. G.	Listowel
T Eason, E. B.	Ottawa	C Gibbons, A. O.	Toronto
T Eby, Miss S. N.	Toronto	C Gibson, J. D.	Toronto
C Eckardt, Miss I. M.	Toronto	C Gibson, R. K.	Oakville
C Eisenberg, W.	Toronto	C Gilbert, W. A.	Toronto
V Elliott, Miss G. A.	Toronto	C Gillard, R. D.	Toronto
C Elliott, H. C.	Toronto	C Gilmore, Miss R. E.	Windsor
V Elliott, Miss L. L. D.	Alliston	T Gilmour, J. K.	Ottawa
T Ellis, G. L.	Mount Forest	M Giroux, R. F.	Toronto
V Emerson, Miss M. G.	Toronto	V Girvan, Miss L. E.	Toronto
V Emke, E. E.	Elmwood	C Glouding, Miss G. C.	Toronto
C English, H. R.	England	M Glynn, J. H.	Moncton, N.B.
C Etkin, Miss F.	Toronto	C Goldberg, Miss A.	Toronto
C Farber, L.	Toronto	C Golden, L. L. L.	Toronto
V Farmery, W. J.	Toronto	C Goldenberg, M.	Toronto
C Farwell, Miss A. M.	Toronto	C Goldie, Miss M. A.	Guelph
C Fauman, A. E.	Toronto	T Goode, Miss S. M.	St. Thomas
C Fearman, Miss E. E.	Hamilton	C Govan, Miss E. S. L.	Toronto
V Fennell, Miss H. M.	Havelock	C Gowan, J. W.	Toronto
V Ferguson, C. H.	Bowmanville	C Gowling, Miss H. E.	Ottawa
T Ferguson, Miss H.	Port Stanley	V Graham, Miss M. A.	Chesterville
C Ferguson, Miss P. M.	Dundas	C Graham, N. D.	Regina, Sask
V Ferguson, R.	Sarnia	M Grant, Miss H. M.	Toronto
C Ferguson, W. M.	Toronto	V Grant, H. W.	Toronto
C Fergusson, T. M.	Brussels	C Grant, R. W.	Midland
V Ferrier, G. C.	South Mountain	C Gray, Miss C. M.	Toronto
V Ferris, T. J.	Cobalt	C Gray, Miss M. H.	Port Credit
C Findlay, Miss R. M.	Carleton Place	C Gray, M. J.	Cornwall
C Finlayson, R. W.	Midland	C Greening, S. O.	Hamilton
C Fisher, A.	Long Branch	T Greig-Walker, Miss E. E. J.	Toronto
T Fisher, A. M.	Toronto	C Griffith, B. A.	Fruitland
C Fisher, W.	Listowel	C Gringorten, J. H.	Toronto
M Fitzpatrick, Miss M. J.	Hamilton	C Grobba, E. R.	Mimico
M Flanagan, J. C.	Toronto	C Groves, W. R. S.	Fergus
C Fletcher, T. A. K.	Thornton	C Grupe, Miss N. B.	Toronto
T Foote, Miss B. L.	Norwood	C Gunnison, Miss E. H.	Toronto
T Foster, Miss U. F.	Toronto	V Hackett, A. R.	Tara
V Frame, G. R. R.	Toronto	V Hagan, J. N.	Gore Bay
C Fraser, Miss E. C.	Toronto	V Hager, M. D.	Midland
M French, Miss M.	Brechin	V Haist, Miss M. D.	Hamilton
C French, W. G.	Caledonia	C Halladay, A. R.	Toronto
V Frost, I. R.	Toronto	C Hamilton, G. W.	Hamilton
V Fuller, Miss G. S.	Toronto	V Hamilton, Miss M. E.	Lethbridge, Alta
V Fuller, Miss M. L.	St. Mary's	V Hare, F. A.	Oshawa
V Fullerton, Miss C. A.	Toronto	C Harper, T.	Toronto
C Fullerton, V. F.	St. Catharines		

†Dispensation for Michaelmas Term.

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
C Harris, Miss A. L.	Toronto	C Jamieson, J. M.	Port Elgin
C Harris, E.	Toronto	C Janis, Miss E. S.	Toronto
M*Harris, J. K.	Burlington	V Jarrett, Miss M. F.	Cayuga
M Harris, J. T. M.	Toronto	C Jermyn, G. H.	Toronto
M Harris, Miss K. A.	Toronto	V Johns, R. P.	Thorahill
V Hart, T. V.	Lansing	T Johnson, C. A.	Toronto
T Hartley, F. W.	Toronto	C Johnson, Miss G. H.	Walkerville
C Harvey, Miss D. M.	Toronto	C Johnston, G. G.	Toronto
C Haughland, Miss E. C.	Toronto	C Johnston, Miss M. M.	St. Mary's
T Heddle, D. M.	Oakville	C Johnston, R. C.	Collingwood
V Hedges, Miss M. E. B.	Toronto	C Jones, Miss J. F.	Toronto
C Henderson, J. I.	Toronto	C Jones, T. E.	Burlington
C Henderson, Miss M. E. M.	Sarnia	V Jordan, Miss K.	Toronto
M Hendriks, P. J.	Toronto	C Jupp, Miss A. C.	Orillia
C Hendry, W. J.	Toronto	V Kaine, M.	Atwood
C Henning, W. J.	Toronto	C Kaplan, Miss B.	Toronto
C Henry, Miss M.	Owen Sound	C Kaplansky, Miss M. E.	Toronto
C Hermant, S.	Toronto	M Keelor, J.	Toronto
C Hewett, J. R. C.	China	C *Kelly, J. C.	Windsor
C Hewitt, Miss N. E. L.	Toronto	M Kelly, J. H.	Carbondale, Pa
M Hickey, J. F.	Geneva, N.Y.	C Kennedy, Miss R. J.	Toronto
V Hilliard, Miss H. B.	Morrisburg	M Kennedy, T. V.	Dunrobin
C Hilt, L. G. W.	Toronto	C Kerlovsky, M.	Preston
C Hinds, Miss I. A.	Toronto	T Kerr, A. W.	Toronto
C Hobbs, G. E.	Toronto	V Kerr, Miss D. I.	Toronto
C Hodgson, R. S.	Winona	C Kerr, Miss M. E. I.	Alliston
V Hogarth, A. R.	Hamilton	C Kerr, R. B.	Hamilton
C Hogg, F. L.	Sault Ste. Marie	M Kerr, W. B.	Toronto
C Hogg, J. S.	Preston	V King, Miss G. M.	Calgary, Alta
M Hohlstein, W. J.	Toronto	M King, Miss L. E.	Stratford
C Holmes, F. M. E.	Toronto	V Kirby, H. D.	Toronto
T Holmes, Miss H. E.	Toronto	C Kirkpatrick, A. G.	Toronto
C Holmes, Miss K. E.	Toronto	C Knights, J. J.	Toronto
C Holton, J. H.	Toronto	M Kormann, Miss M. M.	Toronto
V Honey, Miss F. I.	Cainsville	C Krasnow, Miss G.	Toronto
C Hood, Miss B. A.	Toronto	V Laing, J. N.	Sundridge
M Hopkins, Miss M. C.	Toronto	C Lamb, Miss E. M.	Goderich
V Horwood, Miss E. M.	Toronto	M Langan, V. L.	Sarnia
C Howard, W. R.	Toronto	T Langley, Miss D. A.	Lakefield
C Howell, S. L.	Port Arthur	C Langs, J. G.	Hamilton
C Howland, Miss M. E. C.	Toronto	T Larden, Miss M. F.	North Bay
V Hudson, Miss E. A.	Toronto	C Large, Miss B. M.	Toronto
C Hugli, Miss O. E.	Coniston	V Lautenslager, E. S.	Kitchener
C Hulbig, S. M.	Toronto	C Law, G. D.	Toronto
C Hurwitz, Miss I.	Toronto	M Lawless, F. D.	Grafton
V Husband, Miss M. H. M.	Toronto	V Lawson, K. R.	Orillia
C Husband, Miss M. L.	Toronto	C Lawson, W. L.	Toronto
C Hutchinson, Miss G. E. P.	Oakville	T Layng, Miss L. E.	Smith's Falls
C Iler, P.	Toronto	C Leak, W. A.	Toronto
C Inkster, Miss M. E.	Toronto	M Lee, Miss E. L.	Toronto
C Innes, R. H.	Hamilton	C Lemon, H. W.	Clifford
V Ives, Miss O. L.	Bridgeport, Conn	C Leppard, L. B.	Toronto
C Jack, W. H.	Newton	V Leslie, C. W.	Ingersoll
C Jackson, J. T.	Lethbridge, Alta	C Leslie, W. B.	Niagara Falls
C Jacobsen, R. C.	Toronto	C Lewis, C. B.	Toronto

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
V Lewis, Miss M. E.	Oshawa	C *MacLean, C. M.	Northam, P.E.I
C Lind, Miss M. A.	Toronto	V McLean, J. M.	Woodstock
V Lindsay, Miss H. M.	Hagersville	V McLean, Miss M. E.	Calgary, Alta
C Link, Miss I. E.	Toronto	C McLeish, H. B.	Ottawa
C Litovitch, L. E.	Toronto	C McLennan, J. D.	Toronto
T Little, C. H.	Owen Sound	V McMillan, G. K.	Seagrave
V Livingston, Miss V. L.	Forest	C McMullen, J. R.	Toronto
V Lloyd, Miss E. F.	Hamilton	M McNally, F. J.	Westport
V Londry, A. M.	Meaford	M McNally, O. S.	Newboro
V Lorrman, Miss L. M.	Orono	M MacNamara, F. J.	Eganville
V Lounsbury, Miss D. J.	Hamilton	V McNary, Miss M. G.	Hamilton
V Lovering, Miss M. A. I.	Toronto	C McNaughton, Miss B. J.	Orangeville
C Lowe, G. E.	Toronto	T McNeill, Miss D. M. M.	Brockville
C Lowes, Miss E. G.	Toronto	M McQuillan, J. F.	Toronto
C Lowndes, G. H.	Toronto	C McRitchie, F. C.	Sombra
C MacAfee, Miss M. A.	Cookstown	C McTaggart, Miss I. E.	Beaverton
C MacAlpine, D. A.	Toronto	C McVean, Miss M. F.	Dresden
C Macaulay, Miss M. E. G.	Toronto	C Mabec, R. R.	Toronto
	Port Dover	M Madden, C. M.	Toronto
V McBride, Miss I. M.	Peterborough	T Mader, Miss E. H.	Toronto
M McBride, Miss S. E.	Toronto	C Magee, D. G.	Toronto
V McCall, Miss M. B.	Brantford	M Mahon, Miss H. M.	Sault Ste. Marie
C MacCallum, A. R.	Toronto	C Maitland, R. G.	Toronto
T McCleary, R. J.	Toronto	M Mallon, G. T.	Toronto
V McCulloch, A. H.	Toronto	T Mann, R. H.	Toronto
T McDermott, Miss M. F.	Toronto	V Marcy, E. G.	Galt
C Macdonald, Miss E. S.	Toronto	V Mark, Miss J. P.	Toronto
C Macdonald, Miss H. M.	St. Thomas	T Marsh, F. D.	Niagara-on-the-Lake
C Macdonald, J. D.	Toronto	C Marshall, T. H.	Dunnville
C McEachern, R. A.	Toronto	C Martin, Miss C. G.	Toronto
C McFarland, Miss E. L.	Toronto	M Martin, Miss E. G.	Weston
C McFarlane, W. C.	Hamilton	T Martin, H. A. R.	Hamilton
C McGarry, Miss M. L.	Toronto	V Martin, R. H.	Wexford
C McGillivray, Miss J. C.	Toronto	C Martia, W. M.	Regina, Sask
T M'Gonigle, A. C. R.	Newmarket	T Mason, Miss B. J.	Bowmanville
V McInnis, Miss L. R.	Iroquois	C Masters, D. C. C.	Simcoe
C McIntosh, K. M.	Simcoe	C Matenko, A.	Toronto
V McIntosh, Miss V. L.	St. Catharines	V Matthewson, Miss M. E.	Ridgeway
V McIntosh, W. J.	Seaford	C Maw, Miss V. L.	Port Nelson
C McIntyre, L.	Toronto	T Maxwell, Miss K.	Toronto
C McIntyre, Miss P. I.	Toronto	C Mayor, T. W.	Toronto
C MacKay, Miss G. B.	Oakville	V Medd, Miss E. E.	Exeter
C McKay, Miss I. S.	Collingwood	C Medland, Miss M.	Toronto
C McKay, Miss M.	Port Arthur	V Meech, Miss M. A.	Toronto
C McKay, W. G.	Oshawa	C Merker, H.	Toronto
C Mackechnie, Miss H. M.	Toronto	T Mervynne, R. D.	Pasadena, Cal
V McKee, Miss R. E.	Bridgeburg	V Michener, C. E.	Red Deer, Alta
V McKenzie, K. M.	Orillia	C Mihell, Miss R. G.	Toronto
V *McKinley, K. C.	Toronto	C Miller, C. E.	Milliken
C Mackinnon, C. W.	Toronto	C Miller, Miss J. F.	Bradford
	Charlottetown, P.E.I	C Millichamp, Miss D.	Toronto
C McLaren, Miss O. M.	Toronto	C Mirochnick, Miss S. S.	Toronto
T McLaren, R. E.	Hamilton	C Mitchell, Miss A. L.	Toronto
C MacLaurin, A. L.	Ottawa	C Moad, W. G.	Toronto
C MacLean, Miss A. R. S. R.	Toronto	C Moir, Miss D. A. E.	Peterborough

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
C Moir, Miss H. L.	Toronto	V Pointen, H. W.	Bowmanville
V Mollenhauer, A. O. C.	Newmarket	C Pollock, Miss I.	Toronto
C Mooney, C. E.	Toronto	V Pond, H. I.	Jarvis
C Mooney, Miss J.	Grand Coulee, Sask	C Porter, Miss M. E.	Oakville
M Moore, G. R.	Toronto	C *Posluns, A.	Toronto
V Moore, Miss R. C.	Dundas	M Potvin, Miss C. A.	Toronto
M Morin, J. M.	Toronto	V Power, B. R.	Toronto
C Moynihan, Miss L. M.	Aurora	C Powley, F. B.	Toronto
T Mudge, Miss M.	Toronto	V Presson, J.	Scarborough Jct.
C Mueller, N. E.	Waterloo	V Price, Miss H. D.	Hamilton
T Muirhead, Miss J. M.	Willowdale	V Price, Miss M. D.	Toronto
C Murchison, J.	Charlottetown, P.E.I	C Pullan, Miss H.	Toronto
C Murphy, Miss M. F.	Tara	C Purchase, H. W.	Toronto
C Murray, Miss A.	San Jose, Costa Rica	V Putnam, Miss M.	Toronto
C Murray, Miss J. S.	Toronto	M Quinlan, Miss A. O.	Barrie
T Murrell-Wright, G. O.	Toronto	T Quinn, E. J. C.	Orillia
C Nasmith, Miss M. B.	Toronto	M Radigan, Miss H. M.	Guelph
C Neveren, Miss R.	Toronto	C Raney, D. G.	Orillia
C Newall, Miss M. E.	Toronto	C Raxlen, A.	Toronto
V Newman, S. R. L.	Norham	C Read, C. W.	Gormley
C Nichol, Miss V. B.	Toronto	V *Real, W. G.	Port Perry
T Nichols, E. A.	Toronto	V Reed, Miss F. G.	Sault Ste. Marie
V Nield, W. G.	Toronto	M Regan, W. D.	Creighton Mine
V Nisbet, A. W.	Cranbrook, B.C	T Rehfuss, Miss M. deW. M.	Bridgewater, N.S
C Niven, Miss M. I. M.	Toronto	C Reid, Miss H. M.	Toronto
C Northrup, E. D.	Ellicottville, N.Y	C Reid, T. H. C.	Dawson, Y.T
C Northrup, G. J.	Franklinville, N.Y	V Richardson, Miss H. J.	Whitby
M O'Brien, Miss E. H.	Sault Ste. Marie	C Richardson, Miss M. C.	Elora
M O'Connor, Miss A. M.	Sault Ste. Marie	C Richardson, W. P.	Sarnia
M O'Connor, H. H. J.	Toronto	C Richmond, R.	Huttonville
C O'Connor, Miss M. C.	Toronto	T Ricker, E. A.	Attercliffe Sta
M O'Donnell, J. R.	Jarvis	V Ricker, W. E.	North Bay
C Olstad, E. H.	Toronto	V Riddell, D. B.	Toronto
M O'Malley, Miss H. G.	Collingwood	C Riggs, E. L.	Windsor
V Ostrander, R. C.	Ostrander	V Robbins, O. E.	Wainfleet
V Outram, E. A. R.	Peterborough	C Robertson, A.	Milton
C Paget, E. W.	Huntsville	M Robertson, D. V.	Montreal, Que
T Palmer, W.	Flint, Mich	C Robertson, D. W.	Stratford
C Parker, E. L.	Toronto	C Robertson, Miss M. I.	Toronto
C Parl, Miss M.	Toronto	M Robertson, W. J.	Toronto
V Partridge, H. J.	Barrie	C Robinson, Miss A. L.	Toronto
M Parubocki, M. H.	Toronto	V Robinson, Miss D.	Toronto
M Pasmore, Miss M. B.	Toronto	C Robson, B. C.	Toronto
V Patterson, Miss G. A.	Toronto	C Rogers, G. E.	Toronto
M Patterson, L. D.	Syracuse, N.Y	V Rogers, S.	Tottenham
C Pearson, C. G.	Toronto	C Rogerson, E.	Toronto
V Pearson, Miss D. R.	Newmarket	C Roher, F.	Toronto
C Penhall, D. M.	Port Dover	V *Rosborough, R. C.	Peterborough
V Peterson, Miss B. L.	Rothsay	V Rose, D. W.	Toronto
C Peterson, H.	Hamilton	C Ross, A. M.	Toronto
C Piersol, Miss E. M.	Toronto	C Rotenberg, Miss H.	Toronto
C Pike, Miss D. B.	Toronto	C Rotenberg, Miss L.	Toronto
V Pinchin, Miss J.	Toronto	V Ruby, Miss A.	Port Elgin
V Plewman, W. E.	Toronto		

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
C Ruddy, Miss M. C.	Toronto	C Spence, G. H.	Toronto
V Rutherford, Miss M. E.	Watford	V Spencer, E. R.	Havelock
C Rutherford, W. S.	Toronto	C Spencer, Miss M. K.	Toronto
T Ryan, H. R. S.	Port Hope	V Spooner, Miss E. E.	Toronto
C Sage, G. E.	Brantford	V Springer, J. R.	Port Dover
C Salmon, S. G.	Toronto	C Sprung, L. M.	Stratford
M Sammon, J.	Admaston Sta	T Spurr, Miss M. E.	Liverpool, N.S.
M Sammons, E. C.	Syracuse, N.Y.	C Standish, R. J.	Toronto
C Sanders, W.	Woodstock	C Staples, Miss L. E.	Toronto
C Sanderson, H. B.	Toronto	V Starr, R. N.	Toronto
V Sanderson, J. W.	Toronto	C Steiner, R. N.	Toronto
V Sarjeant, Miss R. L.	Barrie	C Stevenson, Miss M. L.	Kenora
C Saxby, F. R.	Toronto	C Stewart, Miss K.	Toronto
V Scott, Miss C. J.	Preston	T Stewart, Miss M. D.	Barrie
C Scott, D. G.	Toronto	C Stone, Miss E. L.	Chatham
V Scott, R. S.	Norwood	V Strangways, D. H.	Beeton
C Scrimgeour, Miss E. J.	Stratford	C Stringer, W. I. B.	Dawson, Y.T.
T Seagram, N. O.	Toronto	T Stubbings, W. K.	Toronto
V Searle, C. H.	St. Thomas	C Sullivan, Miss M.	Cobalt
C Shanacy, H. J.	Midland	M Sullivan, W. J.	Sturgeon Falls
V Shannan, Miss B. M.	Toronto	V Sulman, Miss A. I.	Belleville
V Shantz, Miss T. A.	Toronto	T Summerhayes, D. T.	Toronto
V Shaver, H. A.	Brockville	C Sumner, Miss E. G.	Ingersoll
C Sherman, C. L.	Toronto	C Sutton, Miss K.	Millbrook
T Sherwood, L.	Ottawa	V Swayze, J. F.	Grimsby
C Shiell, Miss C. T.	Toronto	C Symons, W. P.	Toronto
C Shipley, H. S.	Collingwood	V Taylor, Miss E. W.	India
C Shleser, Miss F.	Toronto	M Taylor, H. F.	Toronto
C Shuttleworth, Miss E. M.	Toronto	T Taylor, S.	Allandale
T Simmers, P. J.	Toronto	M Tenute, Miss M. J. C.	Toronto
T Simpson, Miss M. E.	Bowmanville	V Thompson, Miss E. A.	Toronto
C Sims, Miss E. K. M.	Thistletown	C Thompson, G. M.	Toronto
C Sinclair, G. G.	Toronto	V Thompson, K. M.	Toronto
C Sinclair, J. D.	Toronto	C Thompson, W. K.	Toronto
C Sinclair, Miss M. M.	Oshawa	C Thomson, Miss M. H.	Toronto
C Sinden, Miss B. I.	Toronto	C Thomson, Miss S. M.	Peterborough
C Sinden, Miss W. M.	Toronto	V Thomson, W. M.	Toronto
C Skinner, Miss L.	Ottawa	C Thorburn, W. H. A.	Niagara Falls
V Slack, R. A.	Toronto	V Tiplin, A. H.	St. Catharines
V Slater, F. U.	Toronto	C Tolton, J. D.	Toronto
V Slaughter, Miss L. A.	Toronto	T Tomlins, Miss M. M.	Toronto
C Smith, A. L.	Toronto	V Tourgis, Miss E. M. I.	Toronto
C Smith, D. C.	Echo Place	C Tourtellot, Miss G. K.	Port Arthur
T Smith, G. L. M.	Toronto	C Tovell, W. V.	Toronto
C Smith, J. B.	Toronto	C Tracy, C. R.	Toronto
V Smith, Miss J. D.	Oakville	C Trainer, Miss M. L.	Toronto
C Smith, Miss J. E.	Toronto	C Trainer, S. B.	Toronto
C Smyth, J. R. G.	Toronto	C Treacy, Miss K. A.	Kitchener
V Snell, A. H.	Macdonald Coll., Que	M Trudeau, F. E.	Tweed
V Snell, H. J.	Londesboro	C Tuer, Miss A. E.	Britannia Heights
V Snell, W. L. G.	Toronto	C Tulleken, R. J. van H.	York Mills
V Sneyd, Miss E. H.	Severn Bridge	C Turner, Miss A. M.	Chatham
V Snowball, J. M.	Toronto	C Turner, Miss H. M. H.	Oakville
V Snyder, Miss R. M.	St. Jacobs	M Ulrich, Miss M.	Mildmay
C Speirs, J. M.	Toronto	V Umehara, Miss A. T.	Temperanceville

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
C Upjohn, F. A.	Toronto	M Williams, Miss K. M.	Toronto
V Vanstone, Miss A. L.	Bowmanville	C Willson, R. F.	Fort Erie.
V*Vollett, W. F.	Durham	C Wilson, A. M.	Fergus
C Wade, D. E.	Weston	C Wilson, J. B.	Woodstock
C Walker, C.	Toronto	T Wilson, J. T.	Ottawa
C Walker, Miss E. B.	Toronto	V Wilson, K. D.	Regina, Sask
M Walsh, D. C. C.	Seranton, Pa	C Wilson, S. R.	Hamilton
T Walters, J. A.	Napanee	C Winnett, Miss J. E.	Oil Springs
C Walton, R. G.	Toronto	C*Winslow, E. J.	Toronto
C Wanless, Miss H.	Caledon	C Winter, Miss J. E.	Goderich
C Waring, Miss M. L.	Toronto	C Winter, Miss T. L.	Toronto
M Warnick, P. C.	Toronto	C Withrow E. O.	Toronto
C Warson, S.	St. John, N.B	C Wong, G. P.	China
C Watson, J. E.	Motherwell	V Wong, P. E.	Toronto
C Watson, Miss M. C.	Toronto	C Wood, A. A.	Toronto
C Watt, C. B.	Toronto	V Wood, K. M.	Guelph
V Waugh, Miss E. M.	Lansing	C*Wood, Miss M. P.	Toronto
M Way, Miss I. E.	Brighton	V Wood, W. C.	New Hamburg
C Weber G. H.	Kitchener	M Woods, Miss G. G.	Mimico
V Weber, S. R.	Kitchener	V Woods, Miss L. A.	Napanee
C Webster, Miss E. M.	Toronto	V Wright, Miss A. M.	Rosetown, Sask
M Weiler, A. J.	Mildmay	C Wright, G. M.	Toronto
V Weir, D. T.	Toronto	V Wyatt, M. G.	Stratford
C Weiss, M.	Toronto	C Wynd, R. M.	Japan
V Wellwood, Miss E. M.	Toronto	C Wyndow, Miss M. F.	Toronto
C Welsh, H. L.	Toronto	V Yeoman, E. H.	Sherkston
V West, Miss E. E.	Almonte	C Young, Miss A. B.	Toronto
C Westwood, J. G.	Toronto	C Young, B. O.	Little Rapids
C Wheatley, N. W.	Toronto	M Young, E. M.	Toronto
V White, G. C.	Parry Sound	V Young, E. S.	Toronto
V White, H. R.	St. Mary's	V Young, F. E.	Rockwood
V White, Miss M. L.	Peterborough	C Young, P. E.	Clark, Ohio
V Whiting, R. E.	Toronto	C Yudashkin, Miss I.	Toronto
C Whyte, T. H.	New York, N.Y	C Zimmerman, L. J. H.	Toronto
V Wickett, Miss H. F.	Lindsay	C Zweigman, M.	Toronto
C Wilkins, Miss D. H.	Toronto		

## SUMMARY—FIRST YEAR

University College.....	439
Victoria College.....	214
Trinity College.....	79
St. Michael's College.....	78

810

## SECOND YEAR

C—University College; V—Victoria College; T—Trinity College;  
M—St. Michael's College.

College Name	Home Address	College Name	Home Address
V Abbott, Miss G. M.	Lindsay	V Addison, A. P. S.	Toronto
V Abernethy, J. W.	Tottenham	C Aitken, W. G.	Toronto
C Abramson, Miss R.	Peterborough	C Alexander, H. A. E.	Toronto

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
V Allan, E. A.	Meaford	C Brandon, G. E.	Toronto
C Allan, S. A.	Hamilton	T Brathwaite, Miss L. F.	Toronto
C Allen, Miss H. K.	Toronto	M Breen, Miss L. H.	Toronto
V Allen, Miss J. B.	Milton West	V Briggs, Miss M. L.	Port Credit
V Allin, A. E.	Hampton	C Brown, D. G.	Toronto
C Amys, J. H.	Peterborough	C Brown, H. O.	Port Sydney
C Anderson, Miss F.	Toronto	V Brown, J. K.	Toronto
C Anderson, R. A. F.	Toronto	V Bryden, J. T.	Toronto
C Armour, W. A.	Owen Sound	C Brydone, Miss F. S.	Milverton
V Armstrong, Miss B. L.	Parry Sound	V Bullis, Miss F. J.	Toronto
V Armstrong, C. E.	Listowel	V Burnill, Miss G.	Toronto
V Armstrong, Miss H. P.	Toronto	M Burns, C. E.	Hamilton
C Armstrong, Miss M. A.	Toronto	T Burns, C. F. W.	Toronto
V Armstrong, Miss N. S.	Toronto	V Calder, Miss M. M.	Grimsby
C Arrell, A. H.	Caledonia	C Calhoun, Miss M. K.	Shelburne
C Arthur, Miss M. G.	Owen Sound	C Cameron, R. K.	Whitby
V Ashton, G. E.	St. Thomas	C Campbell, D. H.	Walkerton
C Ausman, L. H.	Toronto	C Campbell, R. G.	Toronto
M Austin, Miss P. C.	Toronto	C Canham, R. B.	Toronto
C Ayers, Miss M. H.	Toronto	C Carroll, L. H.	Toronto
V Ayres, P. B.	Japan	T Carter, Miss G. M.	Hamilton
C Baikie, Miss K. J.	Sudbury	T Cartwright, G. S.	Toronto
C Baker, R. C.	Toronto	C Catto, K. A.	Toronto
V Banbrook, Miss M. E. G.	Brockville	C Clark, Miss A. M.	Toronto
C Bannan, M. W.	Toronto	M Clark, Miss D. G.	Hamilton
T Barrett, H. M.	Windsor	M Clark, J. H.	Florence, N.Y.
C Barton, Miss E. A.	Toronto	C Clark, Miss V. M.	Toronto
C Barton, Miss M. J.	Toronto	M Clark, W. J.	Florence, N.Y.
V Bates, C. L.	Dundas	T Clarke, Miss C. E.	Port Arthur
C Bauslaugh, Miss J. M.	Brantford	C Clarke, C. G.	Waterloo
C Beal, G. W.	Toronto	T Clarke, Miss F. M. G.	Toronto
C Bean, Miss K. L.	Elmira	C Clarkson, R. C.	Toronto
C Beare, W. G.	Agincourt	V Coleman, Miss M. E.	Burlington
C Beath, D. E.	Oshawa	V Cook, I. D. A.	Simcoe
V Beatty, G. A.	Toronto	C Coon, H. E.	Toronto
C Becking, H. W.	Long Branch	V Cooper, J. G.	Swift Current, Sask
V Beer, Miss M. E.	Toronto	C Cormack, R. G. H.	Fort Dodge, Ia
V Bell, E. D.	Clifford	C Cormack, W. B.	Fort Dodge, Ia
C Bell, Miss H. J.	Cayuga	V Cormack, W. D.	Toronto
V Bell, Miss L.	Renfrew	C Cowan, J. M.	Toronto
V Bell, W. R. A.	Burketon	C Cowley, Miss M. J.	Toronto
M Berhalter, Miss I. M.	Thorold	C Coyne, Miss V. J. R.	Brampton
V Berry, H. H.	Guelph	V Cragg, G. R.	Japan
C Better, J.	Toronto	V Cranston, Miss G. A.	Toronto
C Biggar, J. H.	Toronto	T Crawford, Miss V. P.	Madoc
V Binning, Miss M. E.	Moose Jaw, Sask	C Cray, Miss J. E.	Guelph
V Birge, C. A.	Oakville	C Creech, Miss E. I.	Toronto
V Blair, Miss E. S.	Barrie	T Creeggan, Miss K. M.	Deseronto
V Blyth, C. D.	Ottawa	C Creery, D. A.	London
C Boake, M. R. W.	Toronto	C Cress, Miss E. L.	Kitchener
C Bochner, S. J.	Toronto	V Cridland, Miss E. M.	St. Williams
V Bonwick, Miss R. E.	Korea	M Cronin, Miss E. A. S.	Toronto
C Bourne, J. H.	Toronto	C Crossan, J. H.	Toronto
T Bowden, J. J.	Dunnville	V Cullen, W. G.	Kitchener
C Boyd, J. B.	Orillia	C Culp, Miss E. M.	Beamsville
		C Cunningham, R. K.	Toronto



College Name	Home Address	College Name	Home Address
C Currie, D. N.	Toronto	V Evans, Miss E. A.	Bradford
C Currie, J. G.	Warton	C Evans, J. C.	Bradford
C Cutt, T. M.	Goderich	T Eward, H. K.	Toronto
V Dalrymple, Miss H.	Collingwood	M Farrell, Miss H. G.	Toronto
V Danard, N. L.	St. Mary's	T Farwell, C. F.	Toronto
C Davidson, Miss C. S.	Toronto	M Fawcett, W. M.	Hamilton
C Davidson, D. D.	Newton	C Feltenstein, E. P.	Whitby
C Davidson, Miss K. I.	India	V Fennell, E. D.	Havelock
C Davis, A. H.	Winnipeg, Man	C Fenny, W. G.	Toronto
C Davis, Miss J. C. L.	Toronto	T Field, E. M.	Goderich
C Day, A. A.	Toronto	V Fisher, A. H.	Toronto
V Dean, D. W.	Toronto	T Fisher, Miss S. I.	Toronto
V Dean, Miss E. F.	Moosomin, Sask	C FitzGerald, W. T.	Cleveland, Ohio
C Deans, Miss M. M.	Paris	C Fleury, Miss C. W.	Brampton
C Deeks, G. C.	Toronto	V Foley, F. C.	Fraserville
C Dell, H. C.	Leamington	C Forbes, Miss E. G.	Toronto
C DeLury, D. B.	Ottawa	M Ford, J. A.	Hamilton
C Denef, Miss A.	Buffalo, N.Y.	M Fortura, R. R.	Thorold
V Deroche, Miss H. C.	Belleville	C Foster, H. C.	Toronto
V Deroche, W. E. P.	Belleville	C Francis, Miss R. M.	Toronto
C Derry, D.	Airdrie, Alta	C Fraser, Miss A. G. M.	Toronto
V Devitt, H. G.	Toronto	T Fraser, Miss D. M.	Niagara Falls
M Devlin, Miss M. I.	Barrie	V Fraser, Miss J. E.	Clinton
V Dewar, D. G.	Fort William	V Fredenburg, R. L.	Perth
C Dewart, E. H.	Toronto	C Freedman, S. S.	Toronto
T Dewey, Miss M. A. B.	Renfrew	V French, G. S.	Moreton's Harbour, Nfld
C Diamond, A. D.	Toronto	C Gage, J. M.	Hamilton
T Dick, Miss E. R.	Milton	C Gale, G. A.	Vancouver, B.C.
V Dickson, Miss M. E.	Orono	C Gardiner, Miss A. E.	Toronto
C Dignan, H. J.	Exeter	C Gardner, P. A.	Bobcaygeon
V Dobson, Miss K. P.	St. Thomas	V Gegenschatz, Miss H. J.	Toronto
V Dodd, Miss D. A.	Toronto	V George, C. H.	Clandeboyne
V Donohue, W. L.	Niagara Falls	C Gibson, Miss E. C.	Toronto
C Doran, Miss N. M.	Toronto	C Gilfillan, J. J.	Orono
M Dore, Miss M. H.	Hamilton	C Glen, J. S.	Briercrest, Sask
V Douglas, A. C.	Toronto	V Glover, Miss N. L.	Waterford
V Douglas, Miss M. M.	Toronto	C Godfrey, Miss P.	Port Credit
C Douglas, W. D. A.	Shelburne	C Goettler, Miss O. B.	Toronto
V Douglas, W. R.	Canbora	C Goldhamer, H.	Toronto
C Dow, Miss D.	Toronto	M Goodrow, Miss K. M.	Hamilton
C Dow, Miss J. H.	Toronto	C Gordanier, Miss H. G.	Redford, Mich
C Dowler, Miss M. E.	St. Thomas	C Gordon, Miss F.	Toronto
C Dowler, Miss V. B.	Galt	C Gould, M. G.	Bowmanville
M Downey, C. S.	Chapleau	V Gould, S. H.	Paris
V Doyle, Miss D. K.	Calgary, Alta	C Graham, G. M.	Ottawa
M Driscoll, Miss L. A.	Port Hope	C Graham, H. C.	Toronto
C Dunn, Miss D. C.	Leamington	C Graham, P. W.	Aurora
V Dunn, G. L.	Moose Jaw, Sask	C Grant, Miss J. I.	Ottawa
M Dunne, Miss H. A.	Deseronto	C Grant, Miss M. H.	Limerick, Sask
V Dyke, Miss M. M.	Toronto	C* Gray, H. S.	Toronto
T Eames, Miss M. A.	Grimsby	T Green, E. C.	Toronto
C Edell, L.	Toronto	C Green, Miss L. K.	New Westminster, B.C.
V Elliott, H. R.	Toronto		
M Enright, Miss D. A.	Toronto		
T Erb, J. C.	Preston		

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
C Greenwood, W. H.	Toronto	V Jackson, Miss M. T.	Niagara Falls
C Greer, Miss D. C.	Toronto	C Jackson, W. H.	Pickering
V Grey, E. W. W.	Toronto	T Jafray, R.	Oakville
C Griffin, J. D. M.	Hamilton	T James, Miss D. C.	Regina, Sask
C Griffiths, E. R.	Victoria, B.C.	V James, Miss G. V.	Lindsay
T Grout, Miss M. W.	Amnrior	C Jamieson, Miss M. R.	Maxville
T Guest, D. G.	Oakville	T Jeffrey, H. F.	Sault Ste. Marie
T Gunn, D. D.	Toronto	V Jenner, H. D.	Charing Cross
C Gussack, Miss A.	Toronto	C Jennings, Miss L. E.	Lindsay
C Haight, F. A.	Waterloo	V Jervis, Miss C. M.	Clinton
C Halliday, Miss A. D.	Toronto	C Joel, W.	Toronto
T Hallock, R. T.	Faribault, Minn	C Johnson, H. B.	Stratford
C Ham, N.	Brantford	V Johnston, Miss E. A.	Toronto
C Hambly, Miss E. F.	Toronto	V Johnston, J. R.	Ottawa
C Hamilton, Miss J. I.	Toronto	T Johnston, Miss M. B.	Kingsville
T Hardisty, Miss P. M.	Galt	M Jones, Miss M.	Pembroke
V Hare, A. H.	Toronto	C Keeler, Miss K. M.	Toronto
M Harris, Miss V. M.	Toronto	C Kellerman, M. W.	Toronto
C Harrison, Miss R. E.	Chicago, Ill	T Kelly, Miss M. D.	Toronto
V Hayward, R.	Toronto	V Kendall, R. V.	Toronto
V Heard, R. D. H.	St. Thomas	V Kennedy, W. S.	St. Thomas
M Hefferman, Miss M.	Toronto	T Kenny, W. M.	Toronto
C Henderson, H. B.	Toronto	V Ker, Miss D. L.	Toronto
C Henderson, R. G.	Acton	M Kernahan, Miss K. A.	Toronto
C Henry, E. M.	Oshawa	M Killoran, M. A.	Toronto
C Herron, Miss B. K.	Toronto	V King, G. H.	Orillia
C Hetherington, Miss L.	Toronto	C Kompass, A. S.	Hamilton
C Hewson, Miss F. I.	Malton	C Kopman, P.	Toronto
C Hicks, Miss E. G.	Essex	C Laing, D. R.	Brockville
M Hilborn, J. R.	Galt	C Lake, Miss M. H.	Toronto
V Hill, R. W.	Ohswaken	V Langford, H. S.	Islington
C Hills, Miss W. M.	Ashville, N.Y.	C Latchford, L. G.	Toronto
C Hodgson, C. E.	Centralia	V Laughlin, Miss E. E.	Toronto
C Hogg, Miss E. I.	Clinton	V Lawrason, A. B.	Toronto
V Holden, Miss N.	Toronto	C Lawson, L. J.	Elmvale
V Holmes, Miss R. E.	Japan	C Laycock, Miss E. M.	Brampton
C Houser, Miss G.	Toronto	C Lehman, J. L.	Toronto
T Hovey, W. N.	Clinton	C Levi, E. A.	Toronto
C Howard, Miss P. B.	Dundas	C Levi, S. G.	Toronto
V Howe, E. G.	Regina, Sask	C Levy, N.	Toronto
C Howe, Miss R. E.	Toronto	C Lieberman, J. W.	Toronto
M Howell, Miss T. C.	Toronto	C Lindsay, W. F.	Whitby
V Hubbert, Miss H. M.	Toronto	C Lipshitz, Miss A.	Toronto
C Huff, Miss H. M.	Toronto	C Littner, B. C.	Toronto
C Hugill, Miss R. W.	Troy	C Littner, Miss T. M.	Toronto
C Hutner, Miss F.	Toronto	C Lockhart, J. W.	Toronto
M Hynes, Miss M. G.	Toronto	V Lockhart, W. C.	Dundalk
V Ireland, C. H.	Mansfield	M LoPresti, A.	Toronto
C Irvine, Miss M. C.	Toronto	C Lovatt, Miss M. W.	Toronto
C Irvine, R. W.	Toronto	C Lowe, Miss M. L.	St. Catharines
C Irving, J. G.	Manitowaning	C Lucas, Miss L. I.	Toronto
V Irwin, Miss G. L.	Toronto	V Lucas, Miss M. I.	Port Perry
C Jack, D.	Newton	M McAndrew, P. J.	Sudbury
M Jackman, Miss M. M.	Collingwood	M McArdle, Miss E.	Toronto
V Jackson, Miss G. M.	Gananoque	V McCallum, Miss C. H.	Regina, Sask

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
M McCann, T. J.	Westport	V Mason, H. C.	Regina, Sask
V McClelland, Miss M. K.	Moose Jaw, Sask	T Massie, Miss C. E. R.	Dunnville
		V Masson, Miss E. M.	Guelph
T McColl, Miss E. M.	Milton	V Mather, J. W. O.	Harley
C McCollum, Miss E. M.	Toronto	M Matthews, C. P.	Melancthon
V McCrear, Miss Z. J. B.	Sault Ste. Marie	C Matthews, W. D.	Toronto
		V Maynard, M. L.	Chatham
V McCulloch, Miss R.	Toronto	V Mearns, Miss K.	Hanover
C McCutcheon, S. B.	Lambton Mills	C Meiklejohn, A. B.	Harriston
M McDonald, J. A.	Toronto	C Merritt, J. H.	Smithville
C McDonald, Miss M. B.	Glencoe	C Mervynne, Miss M. E. R.	Pasadena, Cal
V MacDonald, Miss O. P.	Fort William		
M McDonald, Miss T.	Weston	C Messinger, Miss M.	Toronto
V McDonald, W. B.	Thornhill	C Millar, D. P.	Castleton
C McDougall, Miss L. H.	Ottawa	C Millar, J. W.	Toronto
M McGrath, Miss H. M.	St. John's, Nfld	C Miller, A. H.	Toronto
		C Milligan, R. P.	Corwall
C MacGregor, Miss G. A.	Toronto	C Millman, P. M.	Japan
C McIntosh, Miss J. L.	Toronto	V Mills, T. H.	Wingham
C McKay, R. W.	Oshawa	V Milne, J. D.	Toronto
C McKenzie, Miss M. K.	Toronto	T Mitchell, Miss M. C.	Lucknow
C McKillop, Miss M. M.	Dutton	C Mitchell, Miss R. E.	Toronto
C McKinley, Miss H. I.	Toronto	C Mitchell, Miss R. M.	Toronto
C MacLaren, G. O.	Whitby	C Moles, E. K.	Norwich
C MacLean, Miss F. L.	Toronto	M Monahan, J. J.	Toronto
C MacLean, Miss M. S.	Port Dalhousie	C Montgomery, J. D.	Toronto
		C Mooney, J. R.	Toronto
C MacLennan, L. A.	Fort Frances	V Moore, A. M. T.	Listowel
C McMichael, Miss D.	Toronto	C Moore, A. T.	Campbellville
V Macmillan, Miss A. K.	Toronto	V Moore, Miss G. S.	Lakefield
M McNab, A. J.	Toronto	V Morgan, Miss A. A.	Peterborough
V McNeil, N. C.	Clinton	M Morin, R. H.	Toronto
C McPhail, H. A.	Mt. Prydges	V Morris, Miss M. C.	Eurin, Nfld
T McPherson, J. M.	Collingwood	C Morrow, G.	Toronto
C Macpherson, W. C.	Toronto	T Motoda, Miss H.	Japan
C McTaggart, F. G.	Clinton	V Mott, L. S.	Waterford
C McVicar, G. A.	Toronto	M Moylan, J. P.	Dublin
V McVittie, W. S.	Hespeler	V Muckle, Miss A. M.	Toronto
C Mabee, E. C.	Toronto	C Mueller, A. M. J.	Hamilton
M Macklin, Miss R.	Toronto	V Muir, A. R.	Toronto
C Maconachie, J. E.	Coldwater	C Muir, Miss M. E.	Toronto
V Magee, F. G.	Toronto	M Mulvihill, Miss E. C.	Arnprior
V Mainland, R. J.	Arthur	V Munro, Miss E. T.	Toronto
V Malcolm, Miss J. E.	Toronto	C Navin, Miss M. P.	Toronto
T Malcolmson, Miss A. M.	Kincardine	V Nichol, Miss M. F.	Brantford
M Mallon, J. F.	Toronto	C Nicholls, Miss M. I.	Toronto
M*Maloney, Miss G.	Toronto	V Nicholson, W. M.	Toronto
T Manahan, Miss D. G.	Brockville	T Nicol, Miss M. J.	Creemore
C Marrs, L. E.	Toronto	T Nicoll, C. W. I.	Toronto
C Marshall, R. W. R.	Brampton	C Nie, W. J.	Toronto
V Marston, Miss M. B.	Toronto	C Noble, Miss M. E.	Toronto
C Martin, Miss E. V.	Moose Jaw, Sask.	M O'Brien, B.	Port Credit
T Martin, Miss M. G.	Milton West	V Ogden, A. W.	Toronto
C Martin, W. E. C.	Toronto	V Oliphant, Miss R. E.	Toronto
		C Oltsher, Miss A. S.	Paisley

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
C Omand, J. N.	Toronto	C Rouleston, T. E.	Toronto
M Ord, J.	Mitchell	C Rous, Miss E. H.	Toronto
C Orr, Miss R. M.	Toronto	M Rousselle, Miss M.	Renfrew
V Osborne, S. L.	Toronto	V Rundle, C. G.	Port Perry
V Packham, G. S.	Toronto	C Russell, Miss J. M. P.	Baileboro
C Paget, Miss D.	Huntsville	M Ryan, L. J.	Toronto
V Paisley, E. W. M.	Clinton	M Ryan, W. J.	Toronto
V Pakes, Miss K. M.	Toronto	V Sabiston, R. C.	Unionville
V Partridge, Miss M. C.	Barrie	V Salter, Miss B. M.	Clinton
C Pasternak, A.	Toronto	C Sanders, S. G.	Exeter
C Paterson, Miss L. B.	Alliston	C Saunders, Miss J. E.	Weston
C Patterson, Miss J. E.	Alliston	V Scanlon, Miss M. K.	Edmonton, Alta
C Paul, Miss L. J.	Toronto	V Schafer, E. G.	Waterloo
V Peacock, Miss E. M.	Hamilton	C Schell, Miss M. A.	Alliston
C Pearn, L. R.	Bowmanville	C Schwartz, Miss F.	Toronto
V Percy, G. D.	Smith's Falls	C Schwartz, Miss R.	Toronto
C Perlove, J.	Toronto	M Scollard, P. D.	Peterborough
V Perrett, T. S.	Regina, Sask	V Scott, C. J.	Ingersoll
C Perry, S. C.	Brantford	C Scott, Miss M. L.	Holyrood
V Phillips, Miss L. S.	Windsor	C Scott, Miss M. W.	Alliston
T Phipps, N. E.	Toronto	T Sellers, A. H.	Toronto
V Picrcey, Miss R. M.	Elora	C Senderowitz, Miss A.	Toronto
C Piper, M. L.	Toronto	V Service, G. R.	Stayner
C Plaxton, Miss P. G. G.	Toronto	M Sheedy, Miss M. M.	Toronto
C Pless, Miss K.	Toronto	M Sheppard, H. D.	Kapuskasing
C Plewes, L. W.	Toronto	V Shiraishi, Miss T.	Japan
V Potter, Miss M. A.	Toronto	V Shoemaker, Miss D. R.	Kitchener
C Poyntz, A. R.	Toronto	V Sissons, Miss S. K.	Toronto
C Prager, Miss L.	Toronto	C Smart, E. W.	Chicago, Ill
V Quinsey, Miss H. J. K.	Cayuga	C Smart, J. E.	Brampton
V Ramsay, W. R.	New Liskeard	V Smith, A. G.	Woodville
C Ramsden, Miss J. H.	Grimsby	V Smith, D. R.	Toronto
C Ramsey, G. A.	Walkerton	C Smith, Miss H. G.	Toronto
V Ratz, Miss B. A. M.	Toronto	C Smith, H. R. H.	Toronto
C Ray, L. W.	Toronto	M Smith, Miss M. M.	Toronto
T Ray, Miss M. D.	Batavia, Ill	C Smythe, Miss M. W.	Cobourg
C Reed, Miss N. K.	Toronto	T Snell, G. B.	Toronto
C Reevely, F. R.	Brampton	V Snider, Miss J. M.	St. Jacobs
C Reid, Miss G. A.	Toronto	V Snider, Miss M. M.	St. Jacobs
C Reid, J. G.	Toronto	C Snyder, M. H.	Waterloo
V Reinke, F. H. C.	Hamilton	C Soanes, H. B.	Aurora
C Relyea, T. A.	Toronto	V Solandt, D. Y.	Toronto
C Rendall, Miss I. S.	Fergus	V Sparling, P. H.	Gorrie
M Reynolds, Miss E.	North Bay	V Sparling, T. C.	Woodroffe
V Rieder, Miss M.	Kitchener	V Spaulding, Miss E. G.	Toronto
V Robertson, D. L.	Toronto	C Speers, Miss W. A.	Yorkton, Sask
C Robertson, M. I. S.	Brantford	C Spence, Miss H. M.	Toronto
C Robinson, Miss H. I.	Stratford	V Stanley, R. A.	Toronto
C Robinson, J. B.	New Liskeard	C Stark, W. G.	Toronto
V Rogers, Miss R. C.	Toronto	C Starkman, M. E.	Toronto
C Rose, F. M.	Toronto	C Stephens, C. E.	Islington
C Rosenthal, S. J.	Toronto	C Stewart, A. S.	Charlottetown, P.E.I
C Ross, Miss J. E. B.	Toronto	V Strangways, Miss M. A.	Thornhill
C* Ross, J. H.	Toronto		

\*Michaelmas Term.

†Dispensation for Michaelmas Term.

College Name	Home Address	College Name	Home Address
T Strathy, J. G. K.	Toronto	C Weaver, B. D.	Dunnville
C Street, Miss E. M.	Owen Sound	C Webster, Miss H. L.	Toronto
C Streight, Miss O. B.	Toronto	T Wegenast, Miss E. L.	Brampton
V Strong, Miss A. M.	Toronto	C Weinberg, L.	Toronto
C Struthers, Miss M.	Toronto	C Weir, Miss A.	Sarnia
C Styles, D. A.	Brantford	V Wesley, Miss G. B.	Toronto
C Sutherland, Miss J. E.	Ingersoll	C West, E. C.	Toronto
C Sutherland, Miss M. L.	Chatsworth	C Westerman, Miss I. G.	Neustadt
C Swartz, M.	Oshawa	V Westlake, B. G. J.	Brockville
C Symons, S. H. H.	Toronto	C Westman, Miss E. M.	Toronto
C Taylor, Miss E. L.	Toronto	V Wheatley, Miss J. W.	Regina, Sask
T Taylor, Miss M. E.	Sutton West	C White, Miss M. E. L.	Toronto
C Templin, Miss M. A.	Fergus	C Whitely, Miss O. E.	Goderich
C Thomas, V. L.	Toronto	C Whyte, W. E.	Toronto
V Thompson, W. W.	Hilton	C Wilkie, Miss M. M.	Toronto
C Thomson, D. J.	Toronto	V Wilkins, Miss E. B.	Waterford
T Tilston, Miss P. A.	Manitowaning	V Wilkins, E. G.	Waterford
C Todds, F. A.	Markham	V Wilkinson, Miss L.	Japan
V Tolchard, H. G. G.	Toronto	V Wilkinson, Miss M. E.	Japan
C Tow, D. K.	Toronto	C Willmott, Miss M. E.	Toronto
V Trewartha, Miss E. L.	Clinton	C Willox, G. H.	Niagara Falls
T Turner, Miss F. A.	Millbrook	C Willson, Miss A. L.	Ridgetown
C Turner, Miss S. M.	Toronto	C Wilson, Miss A. A.	Guelph
C Turpin, Miss E. L.	Toronto	V Wilson, E. R.	Sunderland
V Tyers, Miss D. J.	Toronto	C Wilson, Miss G. E. M.	Toronto
T Upshall, A. P.	Toronto	C Wilson, G. W.	Streetsville
V Urquhart, Miss M. F.	Toronto	V Wilson, J. R. M.	Toronto
C Ussher, P. E.	Toronto	V Wilson, Miss M. E.	Charing Cross
V VanLoon, G. L.	Tillsonburg	V Wilson, Miss M. I. N.	Toronto
V Wagner, Miss M.	Kitchener	T Wilton, G. M.	Toronto
C Waldie, J. K.	Toronto	V Wingfield, Miss A. L.	Hamilton
C Walker, Miss E. F.	Toronto	C Withrow, Miss E. M.	Toronto
C Walker, Miss E. M.	Leamington	C Wood, Miss E. J.	Toronto
C Walkey, Miss M. B.	Toronto	T Woodroffe, Miss K. E.	Detroit, Mich
V Wall, A. E.	Richmond Hill	T Woods, Miss M. E.	Exeter
V Wallace, H. D.	Toronto	C Wright, C. R.	Toronto
C Wallwin, Miss S. M.	Toronto	V Wright, Miss E.	Dundalk
C Wanamaker, Miss M.	Niagara Falls	V Young, R. A.	Newtonbrook
C Ward, D. H.	Hamilton	M Zaher, M. J.	Toronto
V Warren, C. A.	Weston	V Zinkann, R. W. J.	Kitchener
V Warren, E. V.	Weston		

## SUMMARY—SECOND YEAR

University College	322
Victoria College	193
Trinity College	55
St. Michael's College	55

## THIRD YEAR

C—University College; V—Victoria College; T—Trinity College;  
M—St. Michael's College.

College Name	Home Address	College Name	Home Address
V Acheson, Miss E. E.	Proton Sta	M Brett, J. H.	Kenora
C Adamson, A. G.	Clarkson	M Brophy, Miss J. M.	Cleveland, Ohio
V Addison, W. J.	Toronto	C Brown, Miss A. E.	Toronto
V Ahara, R. L.	Toronto	C Brown, J. P. E.	Toronto
C Ainslie, G. S.	Comber	C Brunton, W. H.	Marvelville
V Aitchison, Miss P. T.	Hamilton	C Brydone, Miss A. H.	Milverton
C Allan, H. M.	Toronto	V Buchanan, Miss M. E. M.	Toronto
T Allen, Miss F. B.	Mount Forest	V Buik, Miss H.	Toronto
C Alley, Miss A.	Toronto	C Burch, M. E.	Scarborough Jet
C Ament, A. R. G.	Seaforth	M Cain, Miss M. J.	Toronto
C Anderson, W. G.	India	C Cameron, A. Y.	Cobourg
C Andrew, M. W.	St. Thomas	C Campbell, Miss G. V. A.	Toronto
V Andrews, Miss B. M.	Aurora	C Campbell, L. R.	Toronto
V Annetts, Miss M.	Toronto	C Campbell, Miss M. G.	Perth
C Archibald, J. C.	Seaforth	V Cannon, Miss T. C.	Freeman
T Armstrong, A. T. R.	Langstaff	V Cannon, G. E.	Toronto
C Ashbridge, Miss D.	Toronto	C Carp, Miss R.	Windsor
C Bailey, F. G.	Toronto	C Carr, Miss E. M.	Barrie
C Baker, Miss A.	Chatham	C Carr, Miss H. H.	Toronto
C Baker, G. R. G.	Toronto	C Carrick, D. D.	Toronto
T Baldwin, R. R. A.	Toronto	M Carroll, Miss C. H.	Toronto
V Ball, Miss B. A.	Toronto	C Carruthers, G. L.	Toronto
C Ballentine, J. C.	Carnduff, Sask	V Carscallen, C. N.	Lucan
C Balzhazard, Miss I. G.	Toronto	V Carter, Miss H. R.	Picton
C Banks, W. J.	Toronto	C Cassels, Miss C. G.	Toronto
V Barker, J. G.	Cannington	C Castell, A.	Toronto
C Barrington, C. R.	Russell	C Chadwick, Miss H. R.	Toronto
V Bateman, Miss J. E.	Mount Forest	C Channen, A. G.	Barrie
V Bates, Miss L. D.	Japan	C Christie, A. T.	Hamilton
C Baxter, Miss H. J.	Toronto	V Christie, Miss K. P.	Brantford
C Bean, Miss F. M.	Kitchener	V Clare, Miss M. P.	Port Hope
C Beer, W. A.	Toronto	C Clark, Miss M. E.	Midland
C Bell, A. M.	Chatham	V Coburn, J. G.	Toronto
C Bellsmith, Miss F. I.	Orillia	V Coburn, Miss K. H.	Toronto
T Ben-Oliel, Miss V. B.	Collingwood	T Cockburn, Miss C. M. Sturgeon	Falls
V Berry, N. T.	Caledonia	C Cohen, O.	Dundas
C Bertram, R. C.	Toronto	T Coleman, Miss L. E.	Stoney Creek
C Bidney, D.	Toronto	V Coleman, Miss M.	North Bay
V Binnington, A. F.	Uxbridge	T Collins, V. B. J.	Allandale
C Bird, W. E.	Hamilton	T Combe, Miss A. J.	Clinton
T Blachford, E. H.	Toronto	C Conn, G. E.	Tillsonburg
C Black, Miss A. E.	St. Catharines	C Conn, J. M.	Sarnia
V Blair, W. D.	Barrie	C Conrad, Miss G. E. L.	Waterloo
C Blyth, R. A.	Royal Oak, Mich.	C Corbett, W. C.	Fort William
M Bolger, J. R.	Georgetown	C Cornish, Miss L. R.	Toronto
C Bonis, R. R.	St. Mary's	M Coughlin, Miss H. K.	Toronto
M Bourke, J. V.	North Bay	V Courtice, Miss I. L.	Leamington
T Branion, H. D.	Dunnville	T Cox, Miss D. H.	Oakville
V Bravener, Miss M. S.	Whitby	C Craw, W. A.	Victoria Harbour
C Brett, Miss E. E.	Toronto	C Cray, W. M.	Guelph

\* Dispensation for Michaelmas Term.

College Name	Home Address	College Name	Home Address
C Creeper, E. E.	Owen Sound	V Fulton, Miss J. E.	Chesterville
C Cringan, Miss C. G.	Toronto	V Fulton, Miss S. E.	Chesterville
C Crooks, Miss E. M.	Toronto	M Garvin, E. C.	Goderich
T Crosthwait, L. C.	Toronto	C Gassard, H. L.	Toronto
M Crusoe, J. C.	Waterdown	M Gibbons, R.	Toronto
V Cryderman, F. M. H.	Hampton	V Gibson, Miss J. L.	Caledonia
C Currie, Miss M. A.	Toronto	C Giffen, F. J.	Stayner
C Curtis, J. U.	Toronto	V Gilbert, L. A.	Lambeth
C Dale, S. H.	Toronto	V Gill, J. L.	Toronto
V Daly, F. St. L.	London	V Gillan, Miss E. S.	Pakenham
C Daly, G. H.	Napanee	C Godfrey, Miss E. I.	Port Credit
C Dargavel, W.	Toronto	C Goodman, H. G.	Toronto
C Dingle, D. B.	Toronto	M Goodrow, Miss M. G.	Hamilton
C Dinmore, Miss G. R.	St. Mary's	C Gordon, Miss M. E.	Toronto
V Dinmore, K. M.	Toronto	C Gotfried, S.	Toronto
T Ditchburn, Miss E. E. H.	Gravenhurst	M Graham, Miss G. M.	Toronto
C Dobie, Miss D. J.	Port Arthur	V Graham, Miss M. M.	Hamilton
C Dodgson, H. S.	Toronto	C Greenburg, M.	Windsor
C Dowkes, W. F.	Owen Sound	V Gundy, H. P.	Toronto
C Dowling, J. M.	Brantford	T Hadley, I. W.	Toronto
V Duggan, Miss R. E.	Brampton	C Haig, Miss D. G.	Havelock
C Duncan, Miss M. M.	Brantford	C Haines, Miss D. L.	Toronto
C Dundas, F. N.	Montreal, Que	V Hall, H. C.	Guelph
M Dunn, Miss B. C.	Toronto	V Hall, W. S.	Brussels
M Dwyer, Miss S.	Toronto	M Hamilton, Miss M. M.	Stratford
C Eakin, J. S.	Toronto	C Hamly, D. H.	Toronto
T Edgar, F. S.	Preston	C Harkness, Miss M. E.	Toronto
V Elliott, W. E. M.	Norwood	C Harris, R. A.	Toronto
V Emerson, Miss P. H.	Toronto	C Harrison, Miss R. E.	Owen Sound
C Eoll, Miss M. R.	Calgary, Alta	M Hartmann, E. J.	Brantford
C Essery, Miss A. K.	Toronto	C Hartney, E. H.	Ottawa
T Evans, C. C.	Sudbury	C Hawley, Miss O. L.	Toronto
T Evans, F. J. L.	Orillia	C Haydon, Miss F. M. W.	Toronto
C Evans, K. C.	China	M Hayes, Miss A. C.	Toronto
C Ezrin, M.	Toronto	M Hayes, Miss M. C.	Smith's Falls
C Fairbairn, Miss M. E.	Toronto	T Heggie, Miss M. M.	Brampton
C Farewell, C. A.	Toronto	C Helper, Miss R.	Toronto
C Farquharson, D. G.	Jamaica, B.W.I.	V Henderson, Miss M. M.	Waterloo
C Farrell, Miss L. N.	Toronto	C Hennick, S. J.	Oshawa
C Ferguson, J. K. W.	Toronto	C Hewitt, A. W. B.	Toronto
V Ferguson, Miss K. M. E.	Caledonia	V Heyland, Miss J. M.	Toronto
T Finlay, Miss M. J. J.	Niagara Falls	M Hickey, Miss K. F.	Toronto
M Fitzgerald, Miss M. R.	Hillsdale	C Hickson, E. E.	Toronto
M Fitzpatrick, Miss F. T.	Hamilton	C Higgins, Miss H. R.	Clinton
C Forster, Miss J. M.	Toronto	M Hiland, Miss V.	Peterborough
V Forward, Miss M. A.	Iroquois	C Hiltz, A. G.	Toronto
T Foster, Miss K. E.	Toronto	C Hobday, Miss K. M.	Toronto
C Fowler, R. M.	Peterborough	C Hodges, Miss H.	Okanagan Landing, B.C.
C Frank, M.	Toronto	V Hodgson, T. H.	Toronto
C Franklin, Miss E. M.	Toronto	V Hoffman, C. M.	Toronto
C Fraser, G. R.	Lorne	C Hogg, Miss I. R.	Preston
C French, Miss M. H.	Caledonia	C Holt, Miss M. A.	Fat Rock, Mich
V Fulton, E. D.	Lindsay	V Hopkins, E. R.	Moose Jaw, Sask
C Fulton, J. A. G.	Toronto	V Horne, Miss L. B.	Uxbridge
		C Horning, E. L.	Toronto

College Name	Home Address	College Name	Home Address
V Horwood, Miss J. A.	St. John's, Nfld	V Lorraway, Miss H. A.	Welland
V Houston, J. W.	Toronto	C Lugsdin, Miss E. L.	Moncton, N.B.
M Huggins, Miss R. E.	Toronto	M McAlpine, J. C.	Marysville
C Hunt, H. R.	Brantford	C McBride, Miss E. L.	Port Dover
V Hunter, Miss L. H.	Toronto	C McBride, Miss I. H.	Toronto
V Hunter, R. G.	Clinton	C McBurney, R. W.	Sarnia
V Hurlburt, Miss H. G.	Barrie	C MacCallum, Miss H. M.	Toronto
C Ide, F. P.	Ottawa	C McClellan, G. A.	Toronto
C Innes, J. W.	Toronto	V McCubbin, Miss C. E.	Chatham
T Jaques, R. S.	Toronto	T McCullagh, D. G.	Cobourg
C Jeffrey, A. H.	Toronto	C McCullough, Miss M. S.	Harriston
C Jenkinson, M.	Niagara Falls	C McDiarmid, F. J.	Ottawa
C Jennings, R. D.	Toronto	C Macdonald, D. W.	Toronto
T Jermyn, Miss E. L.	Whitby	C Macdonald, E. A.	Sarnia
C Johnston, D.	Toronto	C McDonnell, Miss E. L.	Toronto
C Johnston, Miss E. W.	Ottawa	C McEachern, D. L.	Toronto
C Johnston, H. G.	Ottawa	C McFarlane, A. G.	Toronto
V Johnston, Miss M. S.	Toronto	C McFarlane, J. W.	Toronto
C Johnston, W. W.	Walkerton	M McGarry, J. F.	Toronto
V Jones, C. H.	Bancroft	M McGarvey, Miss M. T.	Toronto
C Jones, H. B. L.	Toronto	C McGillivray, G. A.	Whitby
M Jones, Miss I. B.	Ottawa	C MacGregor, D. C.	Toronto
V Jones, Miss M. E.	Toronto	V McIntyre, B. C.	Revelstoke, B.C.
V Kaffer, Miss G. E.	Hespeler	C Mackay, Miss I. A.	Toronto
V Kaffer, J. W.	Hespeler	C MacKay, R.	Plainfield, N.J.
C Kellock, Miss C.	Huntsville	V McKenzie, Miss S. M.	Leamington
M Kelly, Miss R. H.	Toronto	C Mackey, Miss N. G.	Ailsa Craig
C Kemple, Miss M. T.	New Rochelle, N.Y.	M McKey, T. J.	Toronto
C Kennedy, Miss J. N.	Acton	V McKim, Miss H. L.	St. Mary's
C Kennedy, Miss P. M.	Toronto	V McKinnon, Miss H. K.	Peterborough
V Kenny, M. K.	Whitby	T McKittrick, Miss C. M.	Toronto
C Kenny, W. E.	Orillia	C McKnight, D. H.	Toronto
C Ketchum, K. G. B.	Toronto	C McLaughlin, Miss A. J.	Hamilton
C Kidd, Miss A. D.	Cannington	V McMath, Miss W. A.	Clinton
C Kilgour, J. A.	Oakville	C MacMillan, C.	Lucknow
C King, C. M.	Toronto	V McMullen, Miss A. F.	Toronto
M King, J. M.	Stratford	C MacNamara, F. R.	Toronto
C Kinnear, H. W.	Toronto	C Macnamara, Miss J. G.	Arnprior
V Kitching, J. S.	Hornby	M McNamara, Miss M.	Niagara Falls
C Lacey, Miss M.	Chesterville	C McNaughton, Miss D. E.	Toronto
M Lavelle, Miss H. C.	Toronto	T McNiven, Miss V. I.	Acton
C Lawson, Miss K. E.	Toronto	C MacVannel, Miss C.	St. Mary's
C Lehman, A. T.	Toronto	C McVity, L. H.	Toronto
C Lehman, W. E.	Toronto	V Mahoney, Miss A. I.	Keswick
V Leitch, Miss E. M.	Regina, Sask	V Mahoney, H. J.	Guelph
V Lent, E. E.	Toronto	C Mallon, N. F.	Toronto
M Leonard, E. J.	Cobourg	C Marquis, Miss E. H.	Brantford
V Lewis, C. L.	Wallaceburg	V Marriott, Miss R. H.	St. Mary's
V Lewis, S. E.	Brampton	C Marshall, J. E.	Orangeville
V Lidkea, Miss V. I.	North Bay	V Marston, Miss S. I.	Toronto
C Lighthart, Miss D. G.	Guelph	C Martin, Miss R. R.	Goderich
V Lindsay, F. R.	Hagersville	V Mellow, H. A.	Napanee
C Lockhart, R. S.	Woodstock	C Meredith, D. R.	Toronto
M Long, Miss H. M.	Whitby	C Miller, Miss M. E.	Warton
T Loosemore, R. H.	Toronto	C Milliken, Miss M. A.	Toronto



College Name	Home Address	College Name	Home Address
C Mills, A. M.	Newmarket	C Reid, R. H.	London
C Mills, G. C.	Toronto	C Rennick, A. A.	Toronto
V Mills, Miss M. A.	Merrickville	C Reynolds, Miss D. W.	Sudbury
C Mitchell, C. G.	Toronto	C Richards, Miss E. G.	Toronto
M Monkhouse, Miss H. B.	Toronto	C Richardson, F. D.	Harriston
V Monkman, R. J.	Cooksville	V Richardson, Miss H. Rosetown, Sask	
C Mooney, Miss J. A.	Grand Coulee, Sask	V Richardson, Miss S. C. Rosetown, Sask	
M Mooney, T. E.	Portland	V Ricker, Miss E. M.	North Bay
V Moore, Miss J.	Uxbridge	M*Roach, Miss M. G.	Hamilton
C Moore, T. F.	Toronto	C Robertson, F. W.	Toronto
C Morden, K. G.	Toronto	V Robertson, Miss L. E.	Iroquois
C Morrison, C. R.	Toronto	C Robinson, L. G.	Ottawa
T Mudge, G. M.	Toronto	V Robson, D. O.	Toronto
M Mueller, Miss V. E.	Hamilton	C Rose, J. W.	Toronto
C Muirhead, D. B.	Toronto	C Rubin, Miss B. V.	Toronto
C Munday, Miss T. B.	Toronto	C Salmund, K. J.	Toronto
V Mundy, Miss A. K.	Toronto	V Sarjeant, T. R.	Orillia
M Mungovan, D. O.	Toronto	T*Schofield, Miss E. A.	Victoria, B.C
M Murphy, Miss A. A.	Mount Forest	C Scholes, Miss C. V. L.	Toronto
C Murphy, Miss V. R.	Wardsville	C Scholfield, G. P.	Toronto
V Newman, R. G.	Spencerville	C Scholfield, W. D.	Toronto
T Nind, P. H. M.	Toronto	C Schwartz, Miss F.	Toronto
M Nolan, Miss C. A.	Bradford	M Scollard, R. J. L.	Toronto
C*Norris, Miss M. E.	Toronto	C Scott, Miss E. C.	Toronto
C Norton, Miss E. C.	Toronto	M Scully, E.	Pembroke
C Nunn, G.	Toronto	C Sharpe, H. L.	Toronto
M O'Brien, Miss A.	Toronto	V Shaw, Miss H. R.	Toronto
C Oille, Miss G.	Sparta	M Sheehan, H. P.	St. Catharines
T Oliver, Miss H. E.	Toronto	V Shields, G. A.	Innerkip
M O'Meara, W. J.	Ottawa	C Shute, W. E.	Windsor
C Pallett, Miss G. M.	Islington	V Simpson, G. T.	Tottenham
C Park, W.	Toronto	V Smith, B. W.	Curries
C Parry, Miss M. L.	Hamilton	C Smith, Miss C. A.	Lansing
C Parsons, Miss E. M.	Toronto	V Smith, C. G.	Toronto
C Paton, J. M.	Kincardine	C Smith, Miss C. K.	Toronto
V Patterson, Miss M. R.	Aurora	V Smith, Miss M. A.	Clifford
C Peace, G. H.	Toronto	V Smith, Miss M. C.	Hickson
C Peachey, E. H.	Toronto	V Smitherman, Miss M. L.	Toronto
C Perkins, H. R.	Chatham	C Sneddon, H. R.	Toronto
C Phelps, Miss F. E.	Toronto	V Snell, Miss B. E.	Londesborough
C Plewes, F. B.	Toronto	C Somerville, Miss M. W.	Orono
C Plumptre, A. F. W.	Toronto	C Soward, R. H.	Toronto
V Powell, Miss A. E.	Toronto	V Sparham, C. E.	Caledonia
M Power, G. C.	Grand Falls, Nfld	V Stafford, Miss D. M.	Dorchester
C Procter, H. A.	Toronto	C Standeven, Miss T.	St. Mary's
C Procter, Miss L. R.	Toronto	C Stanley, Miss E. M.	Toronto
C Quance, G. D.	Delhi	V Stanley, Miss M. E.	Calgary, Alta
M Quinlan, Miss E. M.	Barrie	C Stephens, D. S.	Hamilton
T Ralfe, R. D.	Toronto	V Stevenson, J. C.	Ottawa
C Rasminsky, L.	Toronto	C Stevenson, Miss N. W.	Toronto
V Redmond, Miss H. D.	Toronto	C Stewart, M. T.	Wingham
V Redmond, Miss M. E.	Wingham	C Stewart, R. W.	Fergus
V Reid, Miss A. F.	Brucefield	V St. John, J. S.	Uxbridge
		V Stone, Miss D. C.	Toronto
		V Stouffer, E. S.	Kitchener

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
C Taube, Miss E.	Toronto	C Warnica, Miss J.	Barrie
C Taylor, Miss H. E.	Orillia	C Waters, M. A. J.	Toronto
V Thompson, Miss A. L.	Toronto	C Watkins, Miss I. R.	Norval Sta
M Thompson, Miss M. M.	Toronto	V Webb, Miss M.	Cookstown
V Thompson, W. M.	Hamilton	C Weir, Miss H. E.	Toronto
C Thompson, W. R.	Peterborough	V Wells, Miss M. A.	Islington
C Thomson, B. J.	Toronto	V Wells, Miss M. E.	Islington
C Thomson, J. E.	Hensall	V West, Miss E. K.	Almonte
V Tolchard, Miss R. E. A.	Toronto	C West, E. W.	Toronto
C Towle, Miss D. E.	Toronto	C† Weston, Miss A. F.	Toronto
V Tucker, A. W.	Toronto	T White, Miss M. R.	Toronto
T Turnbull, R.	Niagara Falls, N.Y.	C Wilensky, Miss J.	Toronto
V Turner, Miss K.	Toronto	C Wilkins, Miss M.	Toronto
V Tyhurst, Miss E. M.	Regina, Sask	V Williams, A. F.	Cannington
C† Usher, Miss M. F.	Toronto	V Wilson, R. V.	Toronto
C Varty, J. A.	Markdale	C Wishart, F. O.	Paris
C Vila, H. M.	Hamilton	C Wood, Miss D. S.	Toronto
V Wales, Miss A. E.	Napanee	C Woodroffe, E. K.	Annapolis Royal, N.S
C Wales, Miss I. K.	Toronto	V Woods, N. J.	Watford
C Walker, D. J.	Toronto	C Woodside, M. St. A.	Winnipeg, Man
C Walker, E. A.	Toronto	C Woodworth, Miss C.	Toronto
C Walker, J. W.	Toronto	C Woolcombe, Miss W. D.	Goderich
C Walkinshaw, J. W.	Toronto	T Wright, J. A.	Amherstburg
C Wallace, Miss W. M.	Toronto	C Wrinch, Miss M. G.	Lambton Mills
C Wallace, W. P.	Toronto	C Young, G. W.	Toronto
V Wansbrough, F. A.	Grand Valley	C Young, Miss M. J.	Scarborough Jc†
C Warnault, Miss A. M. A.	Toronto		

## SUMMARY—THIRD YEAR

University College	268
Victoria College	129
Trinity College	34
St. Michael's College	40
	<hr/> 480

## FOURTH YEAR

C—University College; V—Victoria College; T—Trinity College;  
M—St. Michael's College

College Name	Home Address	College Name	Home Address
C Abbott, Miss E. B.	Toronto	V Andrew, Miss L. I.	Toronto
C† Adams, Miss H. P.	Toronto	C Andrews, Miss E. L.	Simcoe
V Addison, Miss M. C.	Toronto	C Armour, I.	Oakville
C Aggett, Miss K. H.	Toronto	M Austin, J. E.	Pembroke
C Allen, J. F.	Georgetown	C Bale, Miss E. G.	Toronto
M Andary, Miss H. C.	Sault Ste. Marie	C Bales, J. H.	Lansing
C Anderson, Miss D. M.	Port Dover	C Ball, Miss H. M.	Harriston
C Anderson, J. M.	London	C Barber, J. R.	Georgetown
C Anderson, Miss K. E.	Toronto	C Barker, R.	Toronto

†Dispensation for Michaelmas Term.

\*Michaelmas Term.

College Name	Home Address	College Name	Home Address
V Barclay, W. J.	St. Catharines	T Comber, Miss D. M.	St. G.
C Barthelmes, Miss K. M.	Toronto		Bobcaygeon
V Pastedo, G. M.	Moose Jaw, Sask	V Cooke, Miss E. G.	Wolseley, Sask
C Beath, T.	Oshawa	V Cooper, Miss O. L.	Goderich
C Beattie, Miss E. G.	Barrie	T Corrigan, Miss B. M. H.	Toronto
C Beauregard, Miss E. T.	Toronto	C Cosens, Miss E. H.	Toronto
T Beckett, T. R.	Kemptville	V Cosh, Miss A. E.	Bobcaygeon
T Bell, Miss C. M. A.	Alliston	C Cowan, Miss J. A.	Barrie
V Bell, W. M.	Ingersoll	C Cox, G. O.	Palmerston
C Bensley, E. H.	Toronto	V Cragg, C. E. J.	Japan
C Benson, N.	Toronto	C Craw, W. B.	Lucknow
V Blakeman, H. H.	Toronto	M Cronin, Miss C. A. C.	Toronto
C Boake, Miss F. E.	Toronto	M Cronin, Miss M. F.	Toronto
C Boles, Miss K. E.	Simcoe	C Crozier, J. K.	Calgary, Alta
C Bonwick, Miss F. E.	Korea	C Dale, Miss M. R.	St. Mary's
C Borland, Miss E. M.	Toronto	C Dandeneau, Miss D. B. L.	Toronto
C Bradburn, H. I.	Peterborough	C Davidge, Miss A. F.	Toronto
M Bradley, Miss M. L.	Farrellton, Que.	C Davis, B. P.	Newmarket
		C Davis, W. J.	Poplar
C Brandon, W. E.	Toronto	V Dawes, Miss R. A.	Toronto
V Briggs, Miss R. M.	Port Credit	C Dayment, F. R.	Toronto
T Brillinger, E.	Chippawa	C Denton, F. D.	Niagara Falls
V Brillinger, H. R.	Toronto	T dePencier, M. T.	Kemptville
C Bristol, J. R. W.	Toronto	V Derby, W. R.	Hanover
V Broughton, Miss L. M.	Corbetton	C Doan, Miss O. H.	Toronto
V Brown, Miss E. A. T.	Kingsville	V Doble, Miss O. E.	Uxbridge
C Brown, G. E. H.	Toronto	M Donohue, W. A.	Sarnia
C Brown, Miss I. A.	Toronto	V Down, H. J.	Curries
V Bryant, L. R.	Guelph	V Dorse, F. A. C.	Regina, Sask
C Buchanan, N. S.	Toronto	V Doyle, A. M.	Toronto
M Burcher, Miss M. L.	Toronto	V Drummond, O. L.	Toronto
C Burgess, J. L.	Orono	V Dufon, J. F.	Stratford
T Burgoyne, Miss L. G.	Grimsby	C Dunkley, J. R.	Toronto
C Burnett, W. W.	Elora	C Edmison, Miss H. L.	Toronto
T Burns, Miss H. W.	Oshawa	C Emery, J. A.	Stratford
V Burrows, Miss I. A.	Toronto	V Endicott, Miss D. D.	Toronto
C Butler, Miss M. E.	Calgary, Alta	C Evans, G. S.	Toronto
T Campbell, D. H.	Toronto	C Evans, J. F.	Toronto
C Campbell, J. C. A.	St. Catharines	C Everitt, Miss C.	Toronto
C Carter, Miss E. M.	Guelph	V Everson, R. G.	Oshawa
V Carver, Miss D. E.	Caledonia	M Farrell, Miss E. P.	Niagara Falls
C Cassidy, F. C.	Toronto	C Faulds, Miss L. M.	Toronto
V Caswell, Miss E. C.	Toronto	V Fenn, Miss B. E.	Bracebridge
V Chapman, W. M.	Uxbridge	C Ferguson, F. A.	Beeton
C Charles, A. F.	Toronto	V Fergusson, Miss E. K. M.	Toronto
V Chown, A. L.	Toronto	C Fine, A.	Toronto
C Clark, Miss K. J.	Sarnia	V Fleming, J. P.	Toronto
C Clayton, L. H.	Ottawa	V Fletcher, Miss I. P.	Oshawa
M Cleary, L. A.	Parry Sound	V Flindall, O. R.	Trenton
V Clements, Miss F. J.	Milton	C Fockler, E. K.	Newmarket
V Clements, J. H.	Elora	T Forrest, Miss M. M.	Port Hope
C Cohn, M. M.	Toronto	V Forsythe, B. C.	Uxbridge
V Collier, H. B.	Toronto	C Francis, L. L.	Toronto
V Collins, J. E.	Trenton	C Fraser, Miss F. E. H.	Toronto
C Colter, Miss G. V.	Cayuga	C Fraser, Miss J. I.	Pembroke

†Dispensation for Session.

College Name	Home Address	College Name	Home Address
C Fraser, R. O.	Hawkesbury	C Jackson, A. J.	Toronto
C Frisby, W. G.	Toronto	V Jackson, Miss M. G.	Cardinal
M Fry, Miss E. L.	Niagara Falls	V Johnston, Miss M. I.	Toronto
V Fulton, R. B.	Lindsay	C Johnston, R. W. S.	Toronto
C Garrow, J. T.	Toronto	C Jones, Miss M. E.	Toronto
C Garvin, J. B.	Sydenham	C Joyce, A. L.	Brantford
C Gibbons, Miss N. E.	Leamington	M Kavanagh, Miss N. F.	Ottawa
V Gilbert, Miss N. M. S.	Bright	C Kay, Miss H. A. R.	Stratford
C Giroux, W. A.	Peterborough	C Keast, Miss A.	Toronto
C Glaister, Miss D.	Wellesley	C Keast, T. P.	Toronto
C Godwin, E. T.	Toronto	C Keith, Miss M. G.	Toronto
C Goforth, J. F.	China	C Kergin, F. G.	Prince Rupert, B.C.
C Goldhar, S. N.	Toronto	C Kergin, W. S.	Prince Rupert, B.C.
C Goldie, J. L.	Guelph	M Kerr, E. A.	Toronto
C Goldstein, J.	Toronto	M Kerr, Miss H. M.	Toronto
C Gollom, J.	Toronto	V Kerr, J. G.	Toronto
C Gordon, Miss H. M. E.	Niagara Falls	V Kingston, Miss D. A.	Campbellford
C Gourlay, D. E.	Toronto	C Klotz, Miss J.	Ottawa
C Graham, A. R.	Ottawa	M Knowlton, W. L.	Toronto
C Graham, D. M.	Toronto	C Lalor, G. C.	Toronto
C Granatstein, S. J.	Toronto	V Lamont, Miss K. J.	Regina, Sask
C Green, H. P.	Toronto	C Langstaff, Miss H. C.	Richmond Hill
C Griffiths, Miss P. M.	Toronto	T Larsen, Miss N. M.	Katrine
C Grosart, A. H. G.	Toronto	C Latchford, J. S.	Toronto
C Gunn, Miss L. J.	Toronto	C Lawson, L. B.	Toronto
V Hackett, W. T. G.	Tara	T Lee, Miss M. J.	Goderich
M Hailey, H. J.	Welland	V Lee, W. E. L.	Woodbridge
V Haller, M. C.	Hagersville	C Legge, Miss M. I.	Toronto
V Hamilton, K. L.	Londesborough	C Leizner, H.	Toronto
M Hanley, J. G.	Shannonville	C Levy, Miss B.	Toronto
C Harding, Miss D. F.	Toronto	V Lewis, Miss M. D.	Smith's Falls
C Hardy, A. S.	Brockville	V Liddy, J. E.	Orangeville
C Harlow, Miss E. B.	Toronto	C Lines, T. H.	Toronto
C Harris, C. G.	Niagara Falls	V Lockwood, W. W.	Victoria, B.C.
T Harris, Miss I. G.	Oxford Mills	C Lorenzen, F.	St. Catharines
M Harrison, Miss R. M.	Tamworth	C Lount, H. F. C.	Toronto
C Harrison, Miss V. V.	St. Catharines	C Low, T. St. C.	Toronto
C Harvie, F. H.	Midland	V Luke, Miss E. F.	Toronto
V Hendershot, H. B.	Kingsville	C Lyon, Miss D.	Toronto
C Hershey, Miss A. D.	Toronto	C Lyon, F. M.	Toronto
V Hewitt, A. G.	Kitchener	M Lyons, W. J.	Ottawa
C Hicks, Miss B. A.	Brantford	C McBride, Miss L. E.	Smith's Falls
C Hill, Miss I. C.	Hartney, Man	V McCallum, J. E.	Regina, Sask
C Hilliard, Miss A. M. C.	Kitchener	C McCormick, Miss D. I.	Pembroke
C Hiltz, Miss M. R.	Toronto	C McCrary, Miss A. M.	Alexandria, Va
V Hodgins, Miss D. B.	Moosomin, Sask	C McCutcheon, W. L.	Brussels
C Houser, Miss E. G.	Toronto	C McDonald, Miss G. E.	Toronto
V Howard, Miss M. S.	Millbrook	M McEaney, V. X.	Toronto
C Hubbell, Miss C. A.	Smith's Falls	C McEvoy, Miss D. R.	Toronto
V Hubbell, Miss F. G.	Smith's Falls	V MacInnes, Miss E. M.	Toronto
V Hunt, Miss M. K.	Chesterville	V McKay, Miss D. J.	Bracebridge
C Hutchison, F. F.	Toronto	C McKay, Miss M. E.	Oshawa
V Hutchison, Miss M. B.	Bracebridge	V McKay, Miss M. R.	Arnprior
C Innes, R. T. L.	Simcoe	C Mackenzie, Miss D. E.	Kincardine
T Irvine, Miss H. G.	Orangeville	C McKenzie, Miss R. J.	Toronto

College Name	Home Address	College Name	Home Address
V McKinley, Miss H. G.	Toronto	T Parker, Miss A. V.	Bowmanville
C McLean, A. C.	Wallaceburg	C Parks, A. E.	Toronto
C McLean, J. L. W.	Port Perry	C Peachey, C. A.	Toronto
C MacLean, Miss S. M.	Corbetton	V Peart, Miss L. C.	Toronto
C McMahon, F. E.	Toronto	C Pepper, A. E.	Prescott
V McMullen, H. F.	Toronto	C Pierdon, Miss I. H.	Toronto
C McMurray, L. M.	Ottawa	C Plaut, A. B.	Ottawa
C McNaughton, Miss M. I.	Orangeville	C Plewes, Miss L. W.	Toronto
C MacTaggart, Miss H. I.	Toronto	C Pocock, L. V.	Brockville
C McTavish, Miss M. C.	Windsor	V Potter, Miss E. V.	Toronto
C Mackie, T.	Toronto	M Powell, T. S.	Toronto
C Madorsky, Miss B.	Toronto	V Price, C. B.	Newburgh
V Magee, R. K.	Brampton	T Pringle, C. C. D.	Prescott
C Malcomson, Miss M. L.	Barrie	V Pugh, Miss I. E.	Whitevale
V Marchant, W. T.	Toronto	V Pyne, C. E.	Toronto
V Marshall, Miss F. A.	Toronto	C Radcliffe, N. D.	Toronto
V Mason, L. M. C.	Bowmanville	T Ralfe, G. W.	Toronto
V Massey, Miss R. E.	Kingsville	C Ramsden, Miss M. C.	Grimsby
T Matheson, Miss G. J.	Ottawa	C Raney, A. S.	Orillia
C Matthews, F. B.	Toronto	T Reid, E. M.	Toronto
C Medcalf, G. C.	Ottawa	V Reid, Miss J. A.	Toronto
C Menzies, Miss B. E.	Toronto	V Risdon, F. G.	Granton
C Meretsky, M.	Windsor	C Risk, J. C.	Toronto
V Miller, G. W.	Markham	V Rittenhouse, Miss A. J.	Vineland Sta
C Mills, Miss E. M.	Toronto	V Robertson, H.	Chatham
V Millsap, Miss J. E.	Creemore	C Robertson, O. A.	Ida
C Minsky, J. J.	Toronto	C Robertson, S.	Milton
V Misener, C. C.	Welland	C Robinson, G. deB.	Toronto
V Mitchell, Miss S. P.	Oakville	V Robinson, Miss G. O.	Guelph
C Mitchell, R. C. H.	Hamilton	V Robinson, Miss M. P.	New Toronto
C Mitchell, S. C.	Toronto	C Roos, K. O.	Toronto
V Mooney, Miss F. C. E.	Regina, Sask	C Ross, Miss A. H.	Barrie
C Moore, Miss F. M.	Toronto	C Roth, M.	Toronto
V Moore, J. B.	Toronto	C Ruddock, J. Y.	Toronto
T Moore, Miss M. H.	Toronto	C Rugg, Miss M. E.	Toronto
C Muir, P.	Toronto	C Samuels, L. S.	Toronto
C Murray, Miss F. B.	Toronto	C Satterly, J.	Toronto
V Murray, Miss J. A.	Toronto	V Saywell, H. A.	Toronto
C Murray, Miss M. I. S.	Toronto	M Scandifio, N. F. A.	Toronto
V Murray, Miss M. M.	Toronto	C Scott, G. W.	Toronto
C Myers, C. R.	Toronto	C Scott, Miss L. L.	Toronto
C Nesbitt, W. R.	Toronto	C Sewell, W. S.	Toronto
V Norman, W. H. H.	Japan	C Shapiro, I.	Toronto
V Nourse, Miss D. E.	Toronto	V Shaver, Miss A. M.	Ancaster
M O'Boyle, B. J.	Hamilton	V Shaver, Miss D. M.	Brockville
M O'Connor, Miss D. M.	Sault Ste. Marie	C Shaw, H. V. E.	Toronto
M O'Connor, Miss K. B.	Toronto	C Shaw, Miss M. M.	Toronto
V Ogden, Miss C. L.	Unionville	M Sheehan, Miss M. R.	Springfield, Mass
M O'Keefe, C.	Vernon, B.C.	C Sheehan, H. H.	Toronto
M O'Neill, C. P.	Massena, N.Y.	C Siegel, Miss R.	Toronto
C O'Reilly, Miss F. H.	Toronto	V Sifton, S. C.	Moos Jaw, Sask
C Page, Miss D. R.	Toronto	V Sing, Miss M. B.	Cobble Hill, B.C.
V Panabaker, W. C.	Hespeler	C Singer, L. A.	Toronto
C Park, Miss A. G.	Toronto	C Singlehurst, J. H.	Oakville
		C Smith, B. L.	Toronto

College Name	Home Address	College Name	Home Address
C Smith, E. H.	St. Catharines	M Thompson, G. J.	Teeswater
C Smith, Miss G. A.	Lansing	C Thompson, Miss M. A. J.	Havelock
C Smith, J. F.	Toronto	C Thompson, Miss M. E.	Toronto
V Smith, Miss L. R. N.	Moose Jaw, Sask	V Thompson, W. F.	Toronto
M Smith, Miss M. D.	Toronto	V Tidman, Miss V. M.	Toronto
C Smith, Miss M. R.	Lansing	V Tow, Miss M. C.	Toronto
T Smith, W. F. R.	Oakville	C Tucker, Miss L. E.	Toronto
T Smith, W. L.	Sandwich	C Tudhope, Miss L. F.	Orillia
V Smitherman, A. J.	Toronto	C Turnbull, A. R.	Seaforth
V Snyder, G. A.	Niagara Falls	C Turnbull, Miss M. I.	Toronto
C Snyder, K.	St. Jacobs	V Turner, W. H.	Toronto
C Söderman, Miss H. M.	Red Deer, Alta	C Upshall, W.	Toronto
V Soward, H. G.	Toronto	V Vernon, E. G.	Uxbridge
C Spence, K. D. M.	Toronto	C Vetter, Miss V. C.	Toronto
V Spooner, R. C.	Toronto	C Waines, Miss M. M.	Toronto
C Stacey, C. P.	Toronto	C Wallace, F. E. D.	Brantford
V Stafford, W. I.	Aylmer, Que	V Walton, Miss M. E.	Toronto
C Stanbury, W. S.	Exeter	C Waring, Miss E. A.	Toronto
V Starr, Miss M. A. E.	Toronto	C Watson, Miss E. H.	Thornhill
C Steinhauer, H.	Toronto	V Wattie, Miss D. E.	Bracebridge
C Steiss, E. A.	Heidelberg	V Waugh, Miss A. M.	Lansing
V Sterling, J. E. W.	Thorndale	V Waugh, Miss H. J.	Lansing
V†Stevenson, S. E.	Melbourne	C Weil, Miss S.	Toronto
C Stevenson, Miss S. J.	Toronto	C Weir, Miss N. V.	Toronto
C Stewart, Miss B. E.	Buffalo, N.Y	C West, J. K.	Atwood
T Stewart, C. D.	Barrie	V White, Miss H. I.	Toronto
V Stewart, Miss J.	Toronto	C Wicks, C. A.	Toronto
C Stewart, J. H.	Springfield	C Wickware, Miss H. M.	Smith's Falls
C Stinson, Miss F. M.	Toronto	M Wiley, Miss N.	Weston
C Stirrett, Miss M. M.	Sarnia	C Willard, Miss E. A.	Toronto
C Stollery, C. W.	Toronto	V Willmott, R. O.	Strathroy
C Stollery, F. H.	Toronto	T Wills, Miss N. I.	Jordan
V Sturdy, D. A. H.	Revelstoke, B.C	C Wilson, David J.	Brantford
T Sueden, F. J.	Paris	V Wilson, Douglas J.	Toronto
C Sullivan, Miss F. E.	Stayner	V Wilson, Miss E. B.	Port Arthur
C Sullivan, G. F.	St. Catharines	C Wilson, Miss M. A.	Hamilton
V Sutton, Mrs. F. W. M.	New York, N.Y	V Wiltzie, Miss F. I.	Athens
T Taylor, T. H.	Hamilton	C Wishart, G. A.	Paris
V Thom, S. D.	Regina, Sask	C Woods, J. F.	Toronto
V Thomas, J.	Toronto	T Woods, W. G. B.	Listowel

†Dispensation for Session.

#### SUMMARY—FOURTH YEAR

University College	240
Victoria College	130
Trinity College	27
St. Michael's College	31
Total	428

## OCCASIONAL STUDENTS

U—University of Toronto; C—University College; V—Victoria College;  
T—Trinity College; M—St. Michael's College

College Name	Home Address	College Name	Home Address
U Barker, Miss M. G. ....	Toronto	U Harris, Miss E. E. ....	Fielding, Sask.
U Bauer, Miss B. T. ....	Hamilton	**C Harris, J. T. ....	Toronto
C Beauregard, S. S. T. ....	Toronto	**C Harrison, Miss R. M. ....	Tamworth
U Bell, B. S. ....	Smith's Falls	C Harvey, Miss E. A. ....	Toronto
U Bertram, F. W. ....	Toronto	C Hearne, Miss M. K. ....	Toronto
U Bissett, H. M. ....	Windsor, N.S.	C Heller, K. ....	Austria
U Blyth, Miss J. ....	Mimico	**U Higgins, W. A. ....	Toronto
**C Bolger, J. R. ....	Georgetown	**C Hilborn, J. R. ....	Galt
U Bowlby, Miss K. ....	Aylesford, N.S.	T Hill, Miss V. J. ....	Toronto
C Bowley, Miss V. M. ....	Toronto	U Hodgson, J. A. H. ....	Byng Inlet
**C Bradley, Miss M. L. ....	Farrellton, Que.	**C Hopkins, Miss M. C. ....	Toronto
		**C Huggins, Miss R. E. ....	Toronto
U Britton, G. C. ....	Toronto	V Ide, Miss C. ....	Japan
U Burgess, E. H. ....	Norwood	C Isserman, Mrs. R. F. ....	Toronto
U Campbell, Miss E. B. ....	Toronto	**C Jackman, Miss M. M. ....	Collingwood
C Cattermole, Miss E. R. ....	Boulder, Col.	†C Jackson, Miss E. ....	Kenmore, N.Y.
		U Jackson, P. T. ....	Toronto
C Clair, J. ....	Toronto	T Jennings, C. W. ....	Toronto
U Cobean, H. R. ....	Chesley	T Johnston, W. R. ....	Toronto
U Cohen, H. ....	Toronto	**C Kennedy, T. V. ....	Dunrobin
†U Collinge, Miss A. ....	Whaletown, B.C.	†C Lessard, J. P. ....	Quebec, Que.
C Conn, K. B. ....	Toronto	U Lopez, S. ....	Mexico
U Conover, Mrs. D. S. ....	Toronto	C Lowther, A. A. ....	Toronto
U Coon, Miss M. G. ....	Peterborough	U McCrea, J. D. ....	Sudbury
V Cope, Miss D. R. ....	Toronto	U MacIver, Mrs. E. M. ....	Toronto
C Coulter, H. M. ....	Berwick, Penn.	†C Mackenzie, Mrs. C. B. ....	Toronto
U Crawford, C. H. ....	Toronto	**C MacNamara, F. J. ....	Eganville
V Crosby, H. M. ....	Uxbridge	**C McNamara, Miss M. ....	Niagara Falls
C Dobell, R. J. ....	Toronto		
C Donaghue, Mrs. M. M. ....	Toronto	U McTavish, A. R. ....	Owen Sound
U Douglas, J. G. ....	Owen Sound	C Mahon, Miss E. L. ....	Toronto
†C Dufour, J. A. ....	Murray Bay, Que.	†C Mann, Mrs. C. S. ....	Dayton, O.
U Dunkin, J. J. ....	Brandon, Man.	V Meyer, F. C. ....	Elmwood
C Dunkley, Miss M. R. ....	Toronto	C Mumpel, J. ....	Toronto
**C Farrell, Miss E. P. ....	Niagara Falls	C Niven, Miss M. S. ....	Scotland
U Fitzpatrick, G. A. ....	Toronto	**C Nolan, Miss C. A. ....	Bradford
**CM Flanagan, Miss E. ....	Fort William	**C O'Brien, Miss A. ....	Toronto
		**C O'Connor, Miss D. M. ....	Sault Ste. Marie
V Follett, Miss E. G. ....	Toronto	**C O'Malley, Miss H. G. ....	Collingwood
U Gauley, W. H. ....	Toronto	†U Ord, G. L. ....	Islington
C Gemmill, J. S. ....	Toronto	U Ord, Miss G. M. ....	Islington
C Greig, J. R. ....	Shallow Lake	U Panabaker, Mrs. S. I. ....	Hesper
C Grierson, Mrs. R. ....	Londesboro	C Papp, J. ....	Hungary
U Gruber, R. S. ....	Toronto	**C Pasmore, Miss B. M. ....	Toronto
U Grubin, E. A. ....	Stouffville	C Paterson, Miss J. P. ....	Toronto
U Gullen, F. C. ....	Toronto	U Pelletier, J. R. ....	Marievill, Que.
U Guthrie, Miss J. D. ....	New London, Conn.	U Peters, Miss C. M. ....	Toronto
V Hagerman, Miss M. A. ....	Toronto	U Poile, W. H. ....	Chatham

\*\*Duplicate Registration.

†Easter Term.

College Name	Home Address	College Name	Home Address
**C Power, G. C.	Grand Falls, Nfld.	C Stringer, A. J.	Dawson, Y.T.
**C Quinlan, Miss A. O.	Barrie	C Switzer, Miss J. E.	Toronto
C Raphael, Mrs. S. J.	Sharon, Pa.	**C Thompson, G. J.	Teeswater
C †Reeves, Miss M.	Fort Frances	U Torrance, W. C.	Laurel
U Rose, Miss M. J.	Toronto	V Tucker, Miss A. R.	Winnipeg, Man.
**C Rousselle, Miss M.	Renfrew	C Veneta, J. L.	Port Colborne
**C Ryan, L. J.	Toronto	U Verity, Miss H. E.	Brantford
U Sandwith, H. D.	Kingston	**C Warnick, P. C.	Toronto
†C Scott, S. M.	Lindsay	C Wibby, Miss M. W.	Toronto
V Scroggie, Miss F. E.	Toronto	C Wilcox, J. E.	Toronto
**C Sheppard, H. D.	Kapuskasing	**C Wiley, Miss N.	Weston
U Shupe, R. L.	Galt	V Williamson, Miss N. M.	Kingston
C Speirs, N. R.	Toronto	C Wright, M. J.	Toronto
U Statten, T.	Toronto	**C Young, Miss A. V.	Ennismore
U Stevens, H. A.	Fergus	C Young, Miss D. F.	Trail, B.C.
U Stong, J. W. J.	Downsview	**C Young, E. M.	Toronto

\*\*Duplicate Registration.

†Easter Term.

#### SUMMARY—OCCASIONAL STUDENTS

University of Toronto	46
University College	66
Victoria College	9
Trinity College	3
St. Michael's College	1
Duplicate Registrations	29



## DEPARTMENT OF UNIVERSITY EXTENSION

## SUMMER SESSION 1926

Name	Home Address	Name	Home Address
Ames, V. N. ....	Hamilton	Knight, Miss M. A. ....	Wyoming
Anderson, F. A. D. ....	Kenora	Langdon, R. ....	Toronto
Armstrong, Miss O. V. ....	Bolton	Lendon, W. E. ....	Toronto
Ball, J. R. ....	Kerrwood	Lewis, Miss A. R. P. ....	Hamilton
Barnard, W. T. ....	Toronto	Love, Miss J. C. ....	Exeter
Barton, Miss L. ....	Toronto	Lynch, Miss A. B. ....	Toronto
Brandon, H. E. ....	Midland	Lynch, Miss R. M. ....	Toronto
Brick, R. F. ....	Toronto	McAlpine, Miss A. ....	Caledonia
Brooks, E. F. ....	Toronto	McCarthy, Miss M. ....	Toronto
Brown, W. L. J. ....	Toronto	MacColl, Miss M. ....	Petrolia
Burgar, W. J. ....	Toronto	McDonald, Miss E. E. ....	Sarnia
Burns, Miss M. ....	Toronto	McDonald, R. ....	Parkhill
Cameron, Mrs. E. S. ....	Toronto	McGregor, B. ....	Toronto
Carruthers, Miss L. E. ....	Dundas	McKenzie, Miss R. I. ....	Harriston
Cartwright, G. H. ....	Milton	McLachlin, Miss J. E. ....	Stratford
Chidley, Miss E. ....	Toronto	McNabb, J. T. ....	Windsor
Coffey, Miss M. J. ....	Ottawa	McPherson, Miss S. H. ....	St. Raphaels West
Cole, R. G. ....	Belleville	Maedel, C. W. ....	Norwich
Collins, G. H. ....	Petrolia	Martin, A. A. ....	Newcastle
Collins, W. A. ....	Petrolia	Martin, T. H. W. ....	Weston
Cork, S. F. ....	Toronto	Mason, W. ....	Toronto
Cowie, A. H. ....	Toronto	Mather, G. N. ....	Montreal
Crone, Miss M. J. ....	Toronto	Matheson, C. J. A. ....	Toronto
Cronin, Miss M. M. ....	Toronto	Melady, F. L. ....	Toronto
Davis, Miss M. ....	Colborne	Milne, K. C. ....	Blackwater
Dawson, B. B. ....	Millbrook	Morris, C. M. ....	Southampton
Devitt, L. K. ....	Toronto	Nelligan, Miss E. M. ....	Toronto
Dickinson, G. H. ....	Bowmanville	Newman, R. G. ....	Spencerville
Doupe, H. A. ....	Port Credit	Newton, L. W. ....	Toronto
Duignan, Miss J. M. ....	Hamilton	Nolan, Miss A. ....	Peterborough
Eby, H. E. ....	Toronto	O'Brien, Miss F. T. ....	Erindale
Ellis, C. O. ....	Wooler	Perkin, I. B. ....	Toronto
Evans, Miss V. D. ....	Fort William	Pierson, Miss L. J. ....	Oshawa
Farr, P. W. ....	Emo	Pike, L. W. ....	Stouffville
Firth, J. J. ....	London	Pike, Miss V. I. ....	Palmerston
Fritz, W. E. ....	Toronto	Quinn, Miss M. G. ....	Toronto
Gilles, J. W. ....	Montreal	Robb, I. McN. ....	Toronto
Gilliland, R. A. ....	Owen Sound	Ryan, Mrs. G. E. B. ....	Port Hope
Gray, H. F. ....	Toronto	Ryan, J. M. ....	Aurora
Greening, W. J. ....	Toronto	Rynard, Miss M. E. ....	Sunderland
Grooms, Miss B. ....	Oshawa	Rynard, Miss R. A. ....	Uxbridge
Hardy, Mrs. E. A. ....	Bowesville	Sager, E. ....	Toronto
Hartley, Miss E. M. ....	Norwich	Saul, H. M. ....	Orangeville
Hinchliffe, Miss W. ....	Hamilton	Sayles, Miss P. ....	Southampton
Honsinger, Miss J. D. M. ....	St. Thomas	Scanlon, Miss M. G. ....	Toronto
Hudgins, V. J. ....	Belleville	Scott, Miss O. M. ....	Toronto
Hutchison, C. F. ....	Toronto	Senn, Miss E. M. ....	Brantford
Jackson, Miss A. F. ....	Alliston	Sheridan, Miss R. M. ....	Napanee
James, Miss A. L. ....	Almonte	Silcox, A. P. ....	Shedden
Kelly, W. J. ....	Watford	Sinclair, L. L. ....	Chatsworth
Kennedy, Miss H. E. ....	Princeton	Smith, C. R. ....	Toronto
Klinck, G. A. ....	Elmira	Smith, E. H. ....	Toronto
Klinck, H. ....	Elmira		

Name	Home Address	Name	Home Address
Squire, E. V. ....	Wyoming	Walker, Miss M. A. ..	Oro Station
Stewart, Miss J. ....	Lindsay	Weir, Miss I. M. ....	Toronto
Stewart, R. ....	Milton	Whelan, Miss R. ....	Mt. St. Patrick
Stonehouse, O. M. ....	Walkerville	Wilkin, Miss E. L. ....	Hamilton
Strathdee, Miss M. ....	Ripley	Will, G. ....	Toronto
Stuart, Miss J. H. ....	Toronto	Wilson, Miss B. A. ....	Toronto
Tate, F. J. ....	Toronto	Wilson, Miss B. C. ....	Niagara Falls
Thomas, Miss M. S. ....	Toronto	Wilson, Miss M. A. ....	Hamilton
Todd, Miss H. A. ....	Kemptville	Wilson, Miss M. K. ....	Clarence
Van Loon, J. W. ....	Tillsonburg	Winhold, E. P. ....	Brantford
Wagg, J. E. ....	Mt. Dennis	Youdale, W. P. ....	Belleville

## OCCASIONAL STUDENTS

Adams, Miss M. ....	Toronto	Hereward, P. O. ....	Caterham
Andrews, J. ....	Toronto	Learoyd, Miss A. M. ..	Toronto
Beaupré, F. C. ....	Watford	Moore, J. B. ....	Toronto
Chi, H. T. ....	West China	O'Keefe, Miss C. ....	Toronto
Donald, Miss R. S. ....	Norfolk	Powell, T. S. ....	Toronto
Ferguson, Mrs. F. ....	Toronto	Ryan, Miss M. A. ....	Toronto
Ferguson, G. A. ....	Toronto	Shaw, W. R. ....	China
Heller, Miss K. ....	Haileybury		

## SPECIALISTS' CLASSES

Adams, W. ....	Aurora	Hill, A. S. H. ....	Windsor
Alford, Miss E. ....	Toronto	Hume, A. G. ....	Toronto
Brain, Miss A. B. ....	Caledonia	Keeler, Miss J. ....	Welland
Bruce, V. N. ....	Ottawa	Kelly, Miss A. M. ....	Toronto
Carbin, C. E. ....	Guelph	Kerr, H. H. ....	Galt
Cawsey, Miss C. E. ....	Stratford	Learoyd, C. W. ....	Brockville
Cooke, L. H. ....	Bowmanville	Long, Miss I. ....	Hamilton
Coughlin, Miss C. E. ....	Toronto	McFadden, R. W. E. ....	Brantford
Cronin, Miss M. F. ....	Toronto	McGirr, E. J. ....	Galt
Cruikshank, Miss N. L. ....	Burlington	McLean, B. M. ....	Toronto
Elliott, Miss M. L. ....	Arnprior	Moon, A. M. ....	Niagara Falls
Everest, T. E. ....	Toronto	Morrison, W. K. ....	Richwood
Fair, H. A. ....	Toronto	Morwick, Miss L. I. ....	Hamilton
File, R. R. ....	St. Catharines	Moyer, Miss V. E. ....	Stirling
Flynn, M. J. ....	Hamilton	Nesbitt, R. N. ....	Toronto
Fraser, A. D. R. ....	Windsor	Orr, W. H. ....	Weston
Freiman, C. E. C. ....	Bloomfield	Parker, R. E. ....	Hamilton
Gemmell, J. S. ....	Toronto	Payne, F. J. ....	Upham
Gilroy, A. E. ....	Ottawa	Pickett, Mrs. E. M. ....	Cornwall
Grant, W. J. ....	Toronto	Scarrow, Miss V. ....	Sarnia
Hagerman, Miss M. A. ....	Toronto	Scrimgeour, Miss G. ....	Haileybury
Harston, J. C. ....	Toronto	Skelton, Miss J. E. ....	Mimico Beach
Hember, A. D. ....	Toronto	St. John, J. C. ....	Toronto
Henry, S. E. ....	Timmins	Walton, Miss M. B. ....	Parry Sound
Hepburn, G. ....	Burlington	Whitlock, S. G. ....	Hamilton

## TEACHERS' CLASSES

## TORONTO

Name	Home Address	Name	Home Address
Anderson, Miss G.....	Renfrew	Hewitt, B. H.	Toronto
Anderson, Miss H. D.....	Toronto	Howell, A. J.	Toronto
Armstrong, D. W.....	Toronto	**Hudgins, V. J.	Toronto
Babington, Miss F. M.....	Erin	Hull, Miss J. W.	Toronto
**Ball, J. R.....	Toronto	**Hutchison, C. F.....	Toronto
Banks, Miss M. B.....	Toronto	**Jackson, Miss A. F.....	Toronto
**Barnard, W. T.....	Toronto	Jennings, Miss L. F.....	Toronto
Barr, J. A.....	Toronto	Kell, Miss C.....	Toronto
**Brandon, H. E.....	Toronto	**Kennedy, Miss H. E.....	Toronto
Bremner, H. A.....	Toronto	Kilty, H. R.....	Toronto
Britton, R. H.....	Toronto	**Knight, Miss M. A.....	Toronto
**Brown, W. L. J.....	Toronto	Knott, G. A.....	Toronto
**Burgar, W. J.....	Toronto	Lake, Miss E. M.....	Toronto
**Cameron, Mrs. E. S.....	Toronto	Lang, Miss R. B.....	Toronto
**Cartwright, G. H.....	Toronto	**Langdon, R.....	Toronto
Chard, T.....	Toronto	Lavery, W. G.....	Toronto
**Chidley, Miss E.....	Toronto	**Lendon, H. W. E.....	Toronto
Cochrane, Miss G. L.....	Toronto	**Love, Miss J. C.....	Schomberg
**Cole, R. G.....	Toronto	**Lynch, Miss A. B.....	Toronto
**Collins, G. H.....	Toronto	MacCallum, N. W.....	Toronto
**Corik, S. F.....	Toronto	**McCarthy, Miss M.....	Toronto
**Cowie, A. H.....	Toronto	McCool, Miss A. C.....	Toronto
**Crone, Miss M. J.....	Toronto	McCredie, C.....	Toronto
**Cronin, Miss M. M.....	Toronto	McDougall, D. L.....	Toronto
Cross, Miss J. I.....	Toronto	**McGregor, B.....	Toronto
Cunningham, Miss G. L.....	Cooksville	MacGregor, Mrs. J. E.....	Toronto
Dillon, G. T.....	Toronto	McIver, D. A.....	Toronto
Elliott, A. H.....	Toronto	MacKay, Miss M. M.....	Toronto
**Ellis, C. O.....	Toronto	McLeod, A.....	Toronto
Ellison, Miss J.....	Toronto	McPhail, A. H.....	Toronto
Ellison, R. W.....	Toronto	MacTavish, Miss F. M.....	Toronto
Evans, A. G.....	Toronto	**Maedel, C. W.....	Toronto
Ferrier, Miss C. I.....	Mimico	Maedel, W. A.....	Toronto
**Fritz, W. E.....	Toronto	Manders, C.....	Toronto
Galvin, Miss A. I.....	Toronto	Manson, Miss G. B.....	Toronto
**Gilliland, R. A.....	Toronto	Martin, Miss K. E.....	Toronto
Godbold, R. S.....	Toronto	**Matheson, C. J. A.....	Toronto
**Gray, H. F.....	Toronto	Matthews, H. L.....	Toronto
**Greening, W. J.....	Toronto	**Melady, F. L.....	Toronto
Grigg, Miss M. E. J.....	Toronto	Merritt, R. L.....	Toronto
**Grooms, Miss B.....	Oshawa	Miles, Miss M.....	Cooksville
Hacking, Miss E. M.....	Aurora	**Milne, K. C.....	Toronto
Hall, R. K.....	Toronto	Moncrieff, Miss M. R.....	Toronto
Halliday, Miss I. M.....	Toronto	Montgomery, R. P.....	Toronto
Hancock, E. W.....	Toronto	Moore, H. C.....	Toronto
Hart, M. C.....	Toronto	Mosher, J. H.....	Long Branch Park
Hartwick, W. E.....	Toronto	Naylor, J. F.....	Toronto
Hayes, Miss E. T.....	Toronto	Newton, Miss S. E.....	Toronto
Heinbecker, E. G.....	Toronto	O'Brien, Miss E.....	Toronto
Henderson, J. M.....	Toronto	Paton, W. D.....	Toronto

\*\*Duplicate Registration

Name	Home Address	Name	Home Address
Pautz, G. C.	Toronto	Smith, R. E.	Toronto
**Perkin, I. B.	Toronto	Springate, Miss E. B.	Toronto
Perrin, H. D.	Toronto	Stewart, Miss A. E.	Toronto
Pierce, R. A.	Toronto	**Stewart, R. S.	Toronto
**Pierson, Miss L. J.	Oshawa	Street, Miss S.	Toronto
Plumptre, Miss J. M.	Toronto	Stringer, Miss J. B.	Toronto
Pollard, N. L.	Toronto	**Stuart, Miss J. H.	Toronto
Porter, W. A.	Toronto	Talbot, C. A.	Toronto
Pyne, Miss G. B.	Toronto	Taylor, Miss C. L.	Toronto
Ramsden, F. C.	Toronto	**Thomas, Miss M. S.	Toronto
Rawson, C. M.	Toronto	Tobias, F. C.	Toronto
Reynar, Miss F. C.	Toronto	Trott, C. C.	Pickering
Reynolds, A.	Toronto	Trott, G. T.	Toronto
**Robb, I. M.	Toronto	Tryon, Miss M. J.	Toronto
Robertson, S.	Toronto	Tuck, H. C.	Toronto
Robinson, Miss M. A.	Toronto	**Walker, Miss M. A.	Toronto
Rose, K. R.	Toronto	Walling, W. L.	Toronto
Rumball, W. E. P.	Mimico Beach	Waugh, Miss H. I.	Lansing
**Sager, E.	Toronto	**Weir, Miss I. M.	Toronto
**Scanlon, Miss M. G.	Toronto	Welch, J. E.	Toronto
**Scott, Miss O. M.	Toronto	Westover, E. J.	Weston
Seymour, P. A.	Toronto	**Will, G.	Toronto
Short, J. H.	Toronto	**Wilson, Miss B. A.	Toronto
**Smith, C. R.	Toronto	**Wilson, Miss M. A.	Toronto
**Smith, E. H.	Toronto	Zettler, A. F.	Toronto
Smith, Miss M.	Toronto		

## OCCASIONAL STUDENTS

Cleghorn, R. A.	Toronto	MacEachern, Miss E. V.	Toronto
**Ferguson, Mrs. F.	Toronto	McIntosh, H. W.	Toronto
**Ferguson, G. A.	Toronto	Tompkins, Miss E.	Toronto

## HAMILTON

**Ames, V. N.	Hamilton	Lewis, Miss E.	Hamilton
Beckett, G. E.	Hamilton	Millington, Miss B.	Dundas
Beddie, Miss B.	Hamilton	Moore, Miss M. M.	Hamilton
**Carruthers, Miss L. E.	Hamilton	Pickering, J. R.	Bartonville
**Duignan, Miss J. M.	Hamilton	Pretty, Miss E. I.	Hamilton
Duncan, Miss N. M.	Hamilton	Pullan, G.	Hamilton
Edwards, H. W.	Dundas	Reading, Miss D. C.	Hamilton
Edwards, Miss M. C.	Hamilton	Reinke, H. E.	Grimsby
Ferguson, Miss M. B.	Hamilton	Sabine, Miss M. F.	Hamilton
Finley, J. C.	Hamilton	**Senn, Miss E. M.	Brantford
Gothorpe, Miss J.	Brantford	Smith, Miss E. O.	Hamilton
Halloran, Miss B. M.	Hamilton	Stewart, Miss L. A.	Hamilton
Hanes, Miss M. E.	Hamilton	Troup, Miss M.	Hamilton
Hill, Miss M. A.	Hamilton	Truscott, Miss R. I.	Hamilton
**Klinck, G. A.	Hamilton	Wilde, L. C.	Grimsby
**Klinck, H.	Hagersville	Williams, J. H.	Hamilton
Lambert, Mrs. M.	Hamilton	Wilson, Miss M. E. E.	Hamilton
**Lewis, Miss A. R. P.	Hamilton		

\*\*Duplicate Registration

## OCCASIONAL STUDENTS

Name	Home Address	Name	Home Address
Allan, Miss B.....	Hamilton	Ferguson, Miss E. A. . . .	Hamilton
Bauer, Miss B. M. ....	Hamilton	Honison, Miss C. E. . . .	Hamilton
Bauer, Miss R. K. ....	Hamilton	Honison, Miss E. . . . .	Hamilton
Bell, Miss A. M. ....	Hamilton	Robertson, Mrs. C. R. ....	Hamilton
Booker, Miss H. ....	Hamilton	Smith, Miss G. J. ....	Hamilton
Buick, Miss M. ....	Hamilton	Tugman, Miss A. R. ....	Hamilton
Corke, Miss N. ....	Hamilton	Widdows, Miss D. ....	Hamilton
Dermoddy, Miss C. V. ....	Hamilton	Zimmerman, Miss Z. ....	Hamilton
Dodson, Mrs. S. . . . .	Hamilton		

## OCCUPATIONAL THERAPY

Barr, Miss E. M. F. ....	Toronto	McCutcheon, Miss A. L. ....	Kleinburg
Brigham, Miss G. L. ....	Hanover	McLaren, Miss M. J. ....	Toronto
Burgess, Miss M. V. ....	Elmwood	Mudge, Miss J. L. ....	Toronto
Clarkson, Miss H. E. ....	Toronto	Reid, Miss I. A. M. ....	Toronto
Clavir, Miss E. C. ....	Toronto	Robb, Miss K. G. ....	Toronto
Donald, Miss A. M. ....	Hamilton	Ryerson, Miss E. L. ....	Brantford
Finsten, Miss B. B. ....	Toronto	Sanderson, Miss M. I. ....	Toronto
Harris, Miss E. M. ....	Toronto	Scott, Miss A. M. ....	St. Thomas
Hull, Miss M. L. ....	Winnipeg, Man.	Spalding, Miss E. G. W. ....	Toronto
Jeffrey, Miss J. M. ....	Toronto	Suter, Miss M. K. ....	Dundas
Langley, Miss M. W. ....	Toronto	Swallow, Miss M. B. ....	Stayner
Le Vesconte, Miss H. P. ....	Toronto	Wright, Miss F. L. ....	Toronto
Lewis, Miss J. ....	Toronto		

## SUMMARY—TEACHERS' CLASSES

Summer Session 1926.....	142
Specialists' Classes.....	50
Toronto:	
Regular Students.....	151
Occasional Students.....	6
	157
Hamilton:	
Regular Students.....	35
Occasional Students.....	17
	52
Duplicate Registrations.....	60
Total.....	341

## GRAND SUMMARY—FACULTY OF ARTS

	U. of T	U.C.	V.C.	T.C.	M.C.	Total
First Year.....	439	214	79	78	810	
Second Year.....	322	193	55	55	625	
Third Year.....	268	129	34	49	480	
Fourth Year.....	240	130	27	31	428	
Occasional.....	46	66	9	3	125	
Teachers' Course.....	401	.....	.....	.....	401	
Duplicates.....	89	.....	.....	.....	89	
Total.....	358	1335	675	198	2780	

## FACULTY OF MEDICINE

## FIRST YEAR

Name	Home Address	Name	Home Address
Aberhart, C.	Scaforth	Johnstone, D. W.	Regina, Sask
Abramowitz, Miss R.	Toronto	Karr, D. M.	Toronto
Adamson, D. L.	Orangeville	Keith, J. D.	Toronto
Appel, M.	Toronto	Kelly, J. K.	Regina, Sask
Baillie, A. C.	Toronto	Kelly, R. G. C.	Toronto
Baker, W. W.	Campbellford	King, V. O'D.	Trinidad, B.W.I
Baldwin, W. W.	King	Kitchen, G. H.	Toronto
Barner, H. D.	Toronto	Kofsky, H.	Toronto
Bayne, J. R.	Fergus	Lane, G. B.	Toronto
Beavis, E.	Toronto	Langs, E. R.	Hamilton
Beevor-Potts, C. H.	Nanaimo, B.C	Levine, O.	Toronto
Bellman, Miss A. M.	Collingwood	Lindenfield, C. E.	Parkhill
Borden, H. A.	Guelph	Lipchitz, M.	Toronto
Brandon, K. F.	Toronto	Lorimer, E. A.	Waterville, Que
Breckenridge, R. C.	Toronto	Lowrey, S. R.	St. David's
Brennan, J. W.	Kitchener	McArthur, J. R.	Toronto
Burchell, H. B.	Uxbridge	MacCallum, F. O.	Toronto
Burnett, H. A.	Toronto	MacKenzie, A. L.	Toronto
Cardish, A. A.	Toronto	MacKinnon, N. D. C.	Cranbrook, B.C
Carveth, R. W. J.	Toronto	McLean, C. R.	Mt. Dennis
Christie, F. G. S.	Toronto	McLeod, K. W. A.	Toronto
Cloutier, E. J.	Sudbury	Mahon, Miss G. E.	Woodstock
Coles, B. C.	Woodbridge	Mahoney, J. A.	Toronto
Cornell, J. W. C.	Weston	Malton, R. S.	Toronto
Daly, W. D.	Napanee	Massig, E.	Regina, Sask
Davey, E. J. R.	Hamilton	Meek, B. E.	Port Rowan
Day, C. S.	Toronto	Meiklejohn, R. B.	Harriston
Dean, T. W.	Toronto	Mendelson, L.	Toronto
Dixon, F. O.	Wales	Middlebro, A. S.	Owen Sound
Elkerton, L. E.	Chamberlain, Sask	Milligan, A. D.	Toronto
Ellis, G. H.	Toronto	Milne, D. H.	Elmwood
Foëx, H. E.	Chatham	Mink, M. M.	Toronto
Fox, A. W.	Richmond Hill	Moffatt, J. B.	Toronto
Fraser, Miss C. A.	Vancouver, B.C	Munro, J. A.	Wroxeter
Garbe, W.	Toronto	Mustard, Miss H. J. W.	Uxbridge
Gaughan, Miss M. G.	Collingwood	Neal, W. A.	Peterborough
Gemmell, D.	Stratford	Newbigging, D. K.	Toronto
Gordon, Miss S.	Passaic, N.J	Newman, Miss F. A.	Pictou
Greben, Miss S.	Toronto	Nodwell, R. J.	Hillsburg
Hamblin, G. P.	Toronto	Norman, H. R. C.	Toronto
Haugh, Miss A. M.	Brucefield	Nott, R. F.	Toronto
Haugh, C. H.	Brucefield	Peacock, G. W.	Midland
Henry, A. Z.	Orangeville	Peck, T. V.	Toronto
Hess, C. D.	Hamilton	Pequegnat, H. M.	Kitchener
Hobbs, M.	Harriston	Pim, F. G.	Toronto
Hoffman, I. J.	Toronto	Polito, R. J.	Toronto
Hurlburt, J. V.	Toronto	Porter, B. H.	Toronto
Jackson, D. P. D.	Toronto	Renshaw, H. V.	Toronto
Jackson, G. A.	Toronto	Rice, A. L.	Toronto
Jeffs, J. I.	St. Catharines	Richardson, J. C.	Toronto

Name	Home Address	Name	Home Address
Roberts, J. F.	Toronto	Strauss, H.	Toronto
Rogers, G. K.	Toronto	*Supple, H. A.	Pembroke
Rowson, J. W.	Ingersoll	Sutherland, G. Q.	St. Mary's
Ruskin, M. A.	Toronto	Tanzer, J.	Toronto
Scheinman, Miss L. T.	Toronto	Thomson, J. A. C.	Windsor
Schlotzhauer, K. B.	Stratford	Thomson, M. J. W.	Toronto
Scott, J. A. L.	Brampton	Thorpe, Miss M. O.	Toronto
Scott, J. C.	Toronto	Tickett, F. W.	Toronto
Scott, T. R.	Toronto	Uren, A. R. W.	Toronto
Selznick, M. W.	Toronto	Wade, A. B.	Renfrew
Sihler, J. C. T.	Simcoe	Wasylenko, J.	Coniston
Sinclair, J. W.	Kitchener	Weaver, Miss E. G.	Harriston
Soboloff, J.	Toronto	Whitehead, H. Y.	Hagersville
Sparling, S. E.	Toronto	Williams, C. D. G.	Toronto
Spittel, W. H.	Toronto	Winchester, Miss E. D.	Toronto
Spooner, H. J.	Regina, Sask	Woodhouse, J. E.	Niagara Falls
Steele, E. C.	Toronto	Woodrow, W. A.	Coldwater
Stevens, B. W.	Toronto	Young, E. J.	Toronto
Stillman, A. D.	Brantford		

## SECOND YEAR

Allen, A. G.	Tampa, Fla	Ferguson, J. K. W.	Toronto
Anderson, C. L.	Oshawa	Freeman, K. I.	Toronto
Appel, S.	Chicago, Ill.	Gilbons, R. J.	Toronto
Atkins, J. L.	Toronto	Goldenberg, R. R.	Toronto
Bailey, O. L.	Toronto	Goldstein, W.	Hamilton
Ballantyne, J. C.	Carnduff, Sask	Gunn, D. R.	Toronto
Barrick, C. G.	Port Colborne	Hall, H. C.	Guelph
Bartlett, W. W.	Brampton	Hardman, W. N.	Hamilton
Bates, Miss M. V.	Toronto	Harley, M. L.	Hamilton
Beattie, Miss A. B.	Guelph	Harrison, G. G. K.	Toronto
Bennett, J. C.	Port Arthur	Hawkings, Miss E. M.	Galt
Benson, R. A.	St. George	Henry, G. A.	Warkworth
Blackwell, F. N.	Lindsay	Hetherington, H. H.	Wingham
Blois, G. M.	Toronto	Hill, D. A.	Toronto
Book, M. H.	Toronto	Hodgson, T. H.	Toronto
Eranion, H.	Dunnville	Hoffman, C. M.	Toronto
Brebner, J.	Toronto	Hogg, Miss I. R.	Preston
Brown, W. F.	St. Mary's	Hurwitz, S.	Toronto
Bull, J. A.	Weston	Irvine, A. D.	Dalkeith
Burn, V. E.	Rodney	Jackson, A. N.	St. Thomas
Burton, T. T.	Windsor	James, E. S.	Toronto
Byrnes, T. O.	Toronto	Jeffrey, A. H.	Toronto
Carson, P. S.	Dundalk	Johnson, D. A.	Toronto
Cock, J. G.	Toronto	Johnston, D.	Toronto
Cohen, B.	Toronto	Johnston, W. G.	Drayton
Cosentino, F. V.	Toronto	King, D. M.	Woodstock
Cragg, B. H.	Peterborough	Kitching, J. S.	Hornby
Cull, J. S.	Vancouver, B.C	Knowlton, T. G.	Toronto
Culver, R. W.	Waterford	Knox, Miss A. M. D.	Kelowna, B.C
Dick, J. M.	Toronto	Koenemann, S. P.	Collingswood, N.J
Easton, D. R.	Ayton	Koenig, M. E.	Linwood
Ebbs, H.	Peterborough	Layton, B. D. B.	Toronto
Evans, C. C.	Sudbury	Lee, G. G.	Toronto
Farrell, W. A.	Toronto	Lee, J. H.	Hamilton

\*Michaelmas Term.

Name	Home Address	Name	Home Address
Livingston, J. W.	Toronto	Shuman, P. G.	Toronto
Macdonald, W. D.	St. Catharines	Shute, W. E.	Windsor
McEachern, K. D.	Alvinston	Smith, C. G.	Toronto
McGarry, G. C.	Niagara Falls	Smith, D. B.	Toronto
MacKenzie, K. B.	Hamilton	Smith, I.	Toronto
McKenzie, R. G.	Toronto	Solursh, C. B.	Toronto
MacLean, M. S.	Toronto	Sparks, B. B.	Toronto
MacMillan, C.	Lucknow	Spence, J. M.	Toronto
McNamara, Miss H. E.	Walkerton	Stiles, J. H.	Sutton West
McNaughton, G. A.	Toronto	Stiver, W. B.	Unionville
Manning, H. E.	Oshawa	Stockton, W. H. S.	Calgary, Alta
Markovitz, L.	Toronto	Switzer, E. L.	Terra Cotta
Marshall, A. H.	Dunnville	Taube, H. N.	Toronto
Maukonen, H. I.	Toronto	Thomson, S. A.	Hamilton
Maxwell, W. J. B.	Toronto	Torrance, T. L.	Laurel
Miller, J. H.	Toronto	Towle, Miss D. E.	Toronto
Morgan, J. R. E.	Toronto	Varey, D. H.	Brantford
Perras, J. R.	Ottawa	Waldman, Miss M.	Toronto
Plewes, F. B.	Toronto	Walter, Miss M. A.	Listowel
Pollock, A. D.	Ottawa	Wellman, Miss I. V.	Harold
Preston, C. D.	England	Wellman, M. C.	Harold
Procter, H. A.	Toronto	Widdis, A.	Hamilton
Rapp, C. R.	Toronto	Wilkinson, F. R.	Sarnia
Read, P. M.	Oakville	Wilson, G. E.	Campbellford
Rockman, J. B.	Toronto	Wilson, I. R. F.	Toronto
Rosenberg, N.	Toronto	Wishart, F. O.	Paris
Rosenbloom, L.	Toronto	Woodroffe, E. K.	Annapolis Royal, N.S.
Sakler, B.	Toronto	Woods, A. R.	Lucknow
Sarjeant, T. R.	Orillia	Wyse, L. L.	Toronto
Scandifio, M. A.	Toronto	Young, C. T.	Toronto
Scheff, H.	Toronto	Young, G. W.	Toronto
Shaw, A. G.	Wallaceburg	Zeldin, M.	Toronto
Shortt, C. D.	Toronto		

## THIRD YEAR

Abidh, Miss S. P.	Trinidad, B.W.I	Clarke, F. D.	Brantford
Anthony, G. E. R.	Toronto	Clift, F. A.	Toronto
Bailey, Miss M. E.	Maple	Cragg, G. W.	Greenbank
Bartram, G. T.	Toronto	Cuddy, F. A.	Amherstburg
Bastedo, G. M.	Moose Jaw, Sask	Curtis, J. F.	St. Thomas
Beath, I.	Oshawa	Denoan, J. M.	New Glasgow, N.S.
Beckett, T. R.	Kemptville	De Pencier, M. T.	Kemptville
Bensley, E. H.	Toronto	Donaldson, G.	Revelstoke, B.C.
Biehn, J. T.	Windsor	Doney, E. H.	Toronto
Blaisdell, J. L.	Toronto	Doyle, A. M.	Toronto
Borsook, Mrs. D. L.	Toronto	Dyble, R. H.	Ioco, B.C.
Bradshaw, Miss P. E.	Windsor	Ferguson, G. C.	Sudbury
Brennan, J. H. L.	Dunnville	Ferreira, S. E. L.	Jamaica, B.W.I.
Breslin, Miss E.	Toronto	Fine, A.	Toronto
Brick, Miss M. A.	Toronto	Fine, S. G.	Toronto
Brillinger, H. R.	Toronto	Fleming, J. P.	Toronto
Brooks, L. H.	Wellandport	Forrester, J. H.	Richmond Hill
Brown, B. R.	Toronto	Foster, Miss D. C. T.	Bowmanville
Brown, Miss M. B.	Walkerville	Frejd, E. A.	Bruce Mines
Caldwell, L. A.	Toronto	Gee, Miss E. A.	Gormley



Name	Home Address	Name	Home Address
Glaister, Miss D	Wellesley	Newman, Miss M. J.	Windsor
Glasse, D. W.	Toronto	Nishikawa, F. S.	Toronto
Goldstein, J.	Toronto	Numbers, A. A.	Hamilton
Gollom, J.	Toronto	O'Connor, D. J.	North Bay
Good, S. A.	Kitchener	Oswald, J. R.	Chesley
Gourlay, D. E.	Toronto	Paikin, H.	Hamilton
Graham, J.	Orillia	Parks, A. E.	Toronto
Grant, Miss M. H.	St. Catharines	Parsons, R. M.	Red Deer, Alta
Grant, W. T.	Ottawa	Patterson, Miss M. K.	Newmarket
Gundry, C. H.	Galt	Reeves, A. A.	Toronto
Harris, E. R.	Burlington	Robinson, R. B.	Toronto
Harvie, F. H.	Midland	Rogers, J. R.	Ingersoll
Hawk, W. A.	Galt	Rossiter, J. H.	Sault Ste. Marie
Henry, Miss V. I. E.	Stratford	Rothbart, H. B.	Toronto
Hutton, G. H.	Brantford	Saunders, W. H.	Toronto
Inksater, H. R.	Toronto	Scott, J. M.	Toronto
Jenner, L. C.	Charing Cross	Shapiro, I.	Toronto
Katz, S.	Toronto	Shier, S. G.	Toronto
Kelly, M. J.	Creighton Mine	Silberman, M.	Toronto
Kelly, T. F.	Norwood	Sinclair, B. L.	Sheridan
Kergin, F. G.	Prince Rupert, B.C.	Slavinsky, J.	Toronto
Kergin, W. S.	Prince Rupert, B.C.	Smart, R. E. P.	Brockville
Kubanek, J. L.	Grand Forks, B.C.	Smillie, I. G.	Toronto
Lambert, A. C.	Toronto	Smith, J. H. N.	Barrie
Leizner, H.	Toronto	Smith, Miss M.	Vars
Leslie, S. W.	Toronto	Sparling, D. W.	Toronto
Lewin, G. W.	Niagara Falls	Sparrow, G. R.	Toronto
Lind, J. R.	Toronto	Stanbury, W. S.	Exeter
Long, J. E.	Toronto	Sturgeon, L. W. C.	Gilford
Loree, L. A.	Rockwood	Sweet, W. D.	Toronto
McAteer, D. K.	Mimico	Thomas, J. C.	Toronto
McClinton, Miss I.	Terra Nova	Thompson, E. E.	Penetanguishene
McCullough, J. F.	Sudbury	Thompson, L. W.	Georgetown
McCutcheon, J. W.	Toronto	Track, A.	Toronto
McEachren, J. N.	West Lorne	Wertman, A. M.	Niagara Falls
McGarry, H. H.	Niagara Falls	West, W. G.	Dunnville
McKinney, J. H.	Brampton	Whaley, J. B.	Toronto
MacMillan, J. M.	Rochester, N.Y.	White, C. A.	Fenelon Falls
McRae, J. R.	Toronto	Wicks, C. A.	Toronto
McTavish, S.	Alvinston	Wilford, W. A.	Palmerston
Magee, R. K.	Brampton	Williams, W. W. D.	Pembroke
Miller, G. W.	Markham	Willits, Miss R. E.	Kelowna, B.C.
Miller, J. B.	Toronto	Willmott, R. C.	Strathroy
Misener, C. C.	Welland	Winans, W. C.	Toronto
Monkhouse, W. A.	Toronto	Woodland, L. A.	Toronto
Murray, N. L.	Toronto	Young, W. G.	Toronto

## FOURTH YEAR

Aiken, S.	Toronto	Avruskin, B.	Elora
Anderson, J. F. C.	Saskatoon, Sask	Baldwin, Miss K. W.	Toronto
Anderson, J. L. M.	Port Hope	Ball, N. J.	Toronto
Andrews, F. A.	Aurora	Batt, Miss M. F.	Toronto
Ansley, H. A.	Thessalon	Baxter, K. R.	Upper Hamilton
Appel, A.	Toronto	Becker, R. P.	Toronto
Ashenhurst, A. E.	Toronto	Browne, W. A.	Toronto

Name	Home Address	Name	Home Address
Bryant, E. C.	Toronto	Logan, G. E. C.	Niagara Falls
Burton, Miss B. E.	Toronto	Lucas, T. A.	Sarnia
Calder, R. G.	St. Catharines	Lymburner, R.	Hamilton
Cohen, A.	Toronto	McGillivray, J. R.	Toronto
Cohen, Miss C.	Toronto	McIntyre, A. F.	Owen Sound
Cosens, Miss M.	Wingham	McKeown, R. M.	Marshfield, Ore
Davis, K. F.	Toronto	McTavish, W. A.	Toronto
Denoon, J. W.	New Glasgow, N.S	Marwood, L. R. E.	Yorkton, Sask
Dorland, C.	Burketon	Miller, H. G.	Buffalo, N.Y
Duff, G. A.	Drayton	Mitchell, R. M.	Toronto
Duff, G. L.	Hamilton	Moffatt, T. I.	Port Arthur
Edsall, M. C.	Leamington	Nicholson, R. E.	Waterdown
Epstein, M. D.	Toronto	Overholt, A. A.	Brantford
Fallen, J. A.	North Bay	Paterson, J. A.	Ingersoll
Fineman, L.	Toronto	Peer, R. J.	Port Credit
Fitch, F. F.	Wolfville, N.S	Perfect, K. E.	Toronto
Fleming, J. M.	Toronto	Perry, A. E. B.	Niagara Falls, N.Y
Gardi, V. A.	Sault Ste. Marie	Pollack, B.	Toronto
Garrett, D. R.	Toronto	Pollack, J. J.	Toronto
Gould, J.	Toronto	Pusitz, M. E.	Toronto
Grant, G. H.	Limerick, Sask	Railton, S. V.	Milngrove
Greig, C. H.	Toronto	Raymers, M.	Toronto
Greig, F. M.	Toronto	Reinhorn, A. J.	Toronto
Gundy, J. E.	Windsor	Reiss, H. N.	Toronto
Hall, H. G.	Toronto	Richardson, Miss G. I. J.	Toronto
Hames, G. H.	Oxbow, Sask	Rossman, I. M.	Toronto
Hamill, A. S.	Toronto	Salkin, D.	Toronto
Hardie, P. W.	Esquimault, B.C	Selby, D. L.	Simcoe
Harris, L. J.	Toronto	Sharp, Miss R. C.	Cashmere, Wash
Harvey, J. M.	Exeter	Snell, F. Van V.	Toronto
Hawkins, A. R.	Guelph	Sniderman, B. F.	Toronto
Hawkins, S. J.	Toronto	Sniderman, S.	Toronto
Hillery, D. R.	Toronto	Stanton, O. L.	Toronto
Hollinake, A. F.	Hamilton	Steele, F. H.	Dunsford
Hookings, C. E.	Nelson, B.C	Taylor, H. M.	Bracebridge
Howell, P. T.	Oshawa	Turner, W. A.	Hamilton
Hutchison, G. F.	Kinistino, Sask	Vanderveer, Miss H. L.	Toronto
Ing, Miss M. C.	Toronto	Walker, A. H.	Allandale
Ireland, P. E.	Toronto	Wallace, J. W.	Goderich
Iscovitz, A.	Toronto	Warren, C. M.	Toronto
Ives, L. M.	Belleville	Weid, C. B.	Vancouver, B.C
Jackson, Miss M. V.	Toronto	White, R. G.	Moose Jaw, Sask
Johnston, C. R. K.	Toronto	Wilensky, Miss B.	Toronto
Johnston, J. F. A.	Toronto	Willett, A. W.	Toronto
Johnston, W. H.	Chatham	Wilson, G. E. D.	Toronto
Jones, A. H.	Toronto	Wilson, J. A.	Thorold
Kirkpatrick, T. C.	Toronto	Wright, J. W.	Campbellcroft
Lavine, B.	Toronto	Young, A. E.	Toronto
Lewis, G. A.	New Westminster, B.C	Yuill, B.	Gilbert Plains, Man
Lindzon, S. M.	Toronto	Ziegler, H. R.	Brantford

## FIFTH YEAR

Angus, L. R.	Toronto	Boyle, W. G.	Belwood
Beach, M. L.	Toronto	Brooks, E. F.	Toronto
Belt, T. H.	Toronto	Brown, J. E.	Niagara-on-the-Lake

Name	Home Address	Name	Home Address
Brown, N. R.	Regina, Sask	Laughton, J. L.	Walkers
Brown, R. F.	Toronto	Lawson, F. S.	Toronto
Brown, W. G.	Toronto	Leeder, F. S.	Battleford, Sask
Brownson, C. A.	Belleville	Leef, C. D. S.	Toronto
Cairo, Miss M. R.	Toronto	Lewis, L. H.	Oshawa
Campbell, C. A. L.	Toronto	Luckey, L. E. R.	Toronto
Campbell, I. P.	Toronto	Lyons, J. C.	Cheltenham
Carswell, J. A.	Toronto	McCollum, J. L.	Toronto
Case, G. L.	Toronto	McCullough, Miss D. J.	Toronto
Caswell, J. W.	Toronto	McInnis, J. J.	Ainslie, N.S
Cleghorn, R. A.	London	MacKechnie, G. S.	Toronto
Coutts, M. B.	Assiniboia, Sask	MacKechnie, H. A.	Vancouver, B.C
Crawford, H. W.	Medicine Hat, Alta	MacLean, K. A.	Harriston
Cummings, E. A.	Thornbury	McNiven, E. L.	Victoria, B.C
Dawson, H. S.	Toronto	Macrae, H. M.	Vancouver, B.C
Dillane, J. G.	Toronto	Master, W. M.	Windsor
Fisher, A. J.	Stratford	Menzies, Miss I. R.	China
Fletcher, G. M.	Toronto	Meredith, R. H.	Vancouver, B.C
Flommerfelt, T. E.	Thorold	Messenger, D. B.	Bidgetown, N.S
Forde, J. H.	New York, N.Y	Moore, E. A.	Clarksburg
Franks, W. R.	Toronto	Moscoe, H. A.	Toronto
Gleeson, T. H.	Napanee	Narofsky, S.	Toronto
Grafton, H. F. P.	Singhampton	O'Gorman, J. T.	Toronto
Grant, R. C.	Toronto	Price, G.	Toronto
Gray, K. G.	Toronto	Prior, J. D.	Coldwater
Greay, P. H.	Toronto	Ririe, W. B.	Toronto
Greig, J. W. A.	Seaforth	Robertson, H. F.	Toronto
Guest, W. A.	Ottawa	Robertson, J. R.	Toronto
Haight, Miss R. K.	Waterloo	Rosen, N.	Toronto
Hall, Miss M. E.	Toronto	Ross, J.	Toronto
Hall, M. M. R.	Brampton	Runstadler, Miss M.	Toronto
Hall, W. E. B.	Lindsay	Rykert, H. E.	Dundas
Healy, D. E.	Toronto	Sarles, R. M.	Frankford
Hethrington, H.	Toronto	Shannon, J. G.	St. Catharines
Hills, W. H.	Toronto	Sharfatz, G.	Hamilton
Hoare, D. S.	Toronto	Sher, D.	Toronto
Horkins, H. A.	Toronto	Shier, J.	Vancouver, B.C
Hough, H. R.	Amherstburg	Spackman, R. H.	St. Thomas
Huddart, Miss V. G.	Toronto	Stanbury, R. G.	Campbellford
Hutner, L. M.	Toronto	Stevens, E.	Chesley
James, J. W.	Toronto	Stevenson, C. K.	Alton
Johnstone, Miss R. A.	Chatham	Thompson, Miss M. J.	Toronto
Key, S.	Portland, Ore	Ticklin, P. A.	Toronto
Keenleyside, E. A.	Regina, Sask	Tilley, A. R.	Bowmanville
Kendrick, T. D.	Toronto	Turnbull, F. A.	Vancouver, B.C
Kilpatrick, O. A.	Toronto	Verity, G. E.	Brantford
Kinsman, R. H.	Toronto	Wallace, W. M.	Mt. Dennis
Kirkpatrick, G. M.	Vancouver, B.C	Williams, P. E.	Hamilton
Kitchen, I. D.	Toronto	Willinsky, B.	Toronto
Laird, Miss M. D.	Toronto	Wilson, A.	Oakville
Laird, R. C.	Toronto	Woods, W. L.	Toronto
Large, G. C.	Toronto		

## SIXTH YEAR

Aberhart, W.	Seaforth	Archibald, D. A.	Elora
Ackland, W. E.	Ottawa	Armstrong, J. P.	Ottawa

Name	Home Address	Name	Home Address
Armstrong, L. T.	Port Credit	Macdonald, Miss I. M.	Markham
Bell, E. G.	Copper Cliff	McDermont, R.	Bowmanville
Berry, B. H.	Ottawa	McFarlane, G. M.	Saskatoon, Sask
Bier, L. B.	Brantford	McGibbon, K. C.	Toronto
Bishop, D. S.	Brockville	MacNiel, A. C.	Oakville
Borrowman, R. E.	Toronto	Macklin, L. A.	Goderich
Borsook, H.	Toronto	Marritt, H. D.	Keswick
Bowers, N. H.	Massey	Matheson, J. E.	Vancouver, B.C
Brown, J. A.	Regina, Sask	Mitchell, D. R.	Oshawa
Bull, H. T.	Holland Centre	Morgan, A. L.	Lindsay
Campbell, A. J.	Owen Sound	Mulock, Miss G. E.	St. Catharines
Campbell, Miss G.	Chatham	Murray, P. J.	Cayuga
Cannell, D. E.	Port Carling	Noble, T. D.	Toronto
Chesney, W. E.	Burford	O'Connor, Miss L.	Saskatoon, Sask
Clarke, L. A.	Toronto	Park, W. E.	Fair Ground
Craven, A. J.	Guelph	Patterson, E. B.	Paris
Crawford, W. A.	Craigsmyle, Alta	Peacock, H. J.	Toronto
Crowther, T. A.	Niagara-on-the-Lake	Peeler, D. B.	Toronto
Davidson, J. H.	Jarvis	Piper, R. S.	Fort William
Dinwoody, W. A.	Cookstown	Potter, C. W.	Southend
Douglas, L. H.	Canboro	Pugsley, H. E.	Toronto
Duncan, A. H.	Toronto	Robertson, G. S.	Whitby
Edwards, H. E.	London	Roderick, J. H.	Stoney Creek
Elliott, H. R.	Hamilton	Rodgers, W. H.	Altanta, Ga
Farmer, A. W.	St. Catharines	Rudolph, C. R.	Toronto
Ferguson, C. R.	Toronto	Rutherford, G. H.	Blenheim
Ferrie, K. E.	Hamilton	Ryall, D. B.	Nanaimo, B.C
Fidler, K. A.	Toronto	Saddington, R. S.	Arnprior
Finlayson, R. A.	Dutton	Scott, A. W.	Calgary, Alta
Fraser, Miss I. M.	Hawkesbury	Scott, W. C. M.	Cannington
Gaudin, F. H. A.	New Westminster, B.C	Shute, E. V.	Windsor
Gordon, D. M.	Toronto	Skinner, A. M.	Wilsonville
Gordon, M. K.	Caledonia	Snelling, C. E.	Welland
Graham, J. M.	Goderich	Snyder, W. B.	Toronto
Grainger, Miss H. M.	Creemore	Stevens, G. C.	Dunham, Que
Green, W. M.	Embro	Tansley, E.	Toronto
Hamilton, F. B.	Toronto	Taube, E. L.	Toronto
Harnick, L.	Toronto	Teskey, S.	Sarnia
Heffering, A. R. J.	Toronto	Thompson, J. H.	Toronto
Hilliard, Miss A. M.	Morrisburg	Uren, J. L.	Toronto
Hoffman, B.	Toronto	VanNostrand, F. H.	Vandorf
Hunt, E. A.	Calgary, Alta	Warren, W. J.	Weston
Hunter, K. T.	Newmarket	Webb, A. J. M.	Hamilton
Hutton, D. V.	Brantford	Weber, W. H.	Kitchener
Jackson, G. H.	Port Perry	Webster, J. W. R.	Smith's Falls
Jeffries, C. N.	Toronto	Westheimer, J. R.	Boston, Mass
Kazdan, L.	Toronto	Wharton, G. K.	Cayuga
Keith, W. S.	Toronto	White, G. B.	Toronto
Kelly, J. A.	Long Branch	White, R. A.	North Bay
Kennedy, A. S.	Beeton	Williams, J. K.	Becton
Killoran, V. A.	Peterborough	Williscroft, B. A.	Owen Sound
Knight, E. W.	Toronto	Wood, C. R.	Toronto
Laidlaw, J. B.	Toronto	Wrong, N. M.	Aymler
Linton, F. D.	Port Credit	Wyke, D. A.	Trinidad, B.W.I
Little W. R.	Trenton		

## CANDIDATES FOR THE DIPLOMA OF PUBLIC HEALTH

Name	Home Address	Name	Home Address
Avison, Dr. D. B.	Korea	Laxton, Dr. J. E.	Toronto
Hetherington, Dr. H. B.	Solomon Islands, S.S.I.	McWilliams, Dr. V. H.	Toronto
		Walker, Dr. Agnes M. Y.	Alliston

## CANDIDATES FOR THE DEGREE OF B.Sc. (MED.)

Brebner, Dr. W. B.	Toronto	Irwin, Dr. D. A.	Toronto
Choy, Dr. P. D.	Korea	Verner, Dr. T. B.	St. Catharines
Craw, Miss C. H.	Lucknow	White, Dr. A. W. M.	Chatham
Hershey, J. M.	Toronto		

## GRADUATE STUDENTS

Grierson, Dr. R.	Halifax, N.S.	Large, Dr. R. G.	Port Simpson, B.C.
Henry, Dr. W. E.	Weston	McGill, Dr. J. R. C.	West China
Holmes, Dr. W. H.	Toronto	Rabinowitz, Dr. P.	Toronto
Kelly, Dr. C. B.	West China		

## OCCASIONAL STUDENTS

Henry, Dr. G. G.	Markdale	Dyment, Dr. M. L.	Toronto
------------------	----------	-------------------	---------

## SUMMARY

First Year	137
Second Year	133
Third Year	132
Fourth Year	114
Fifth Year	109
Sixth Year	113
D.P.H.	5
B.Sc. (Med.)	7
Post Graduate	7
Occasional	2
	<hr/>
	750

## FACULTY OF APPLIED SCIENCE AND ENGINEERING

## FIRST YEAR

Name	Home Address	Name	Home Address
Adams, N. D.	Estevan, Sask	Green, J. F.	St. Thomas
Aeberli, A. E.	Toronto	Greer, M. C.	Port Arthur
Algic, W. E.	Brampton	Grosvenor, F.	Toronto
Armstrong, G. T. L.	Toledo, O	Haggart, J. D.	Parry Sound
Armstrong, H. D.	Toronto	Haines, D. G.	Toronto
Banwell, C. D.	Sarnia	Hallam, F. L.	Sarnia
Barton, H. D.	Toronto	Halliday, L. J.	Toronto
Bath, L. F.	Toronto	Halliwell, C. J. A.	Toronto
Payly, B. deF.	Moose Jaw, Sask	Hancock, T. A.	Toronto
Beam, E. K.	Stevensville	Harmer, W. R.	Fullerton
Bell, J. A.	Bonarlaw	Helwig, C. E.	Toronto
Blair, A. P.	North Gower	Heslop, E. G.	Port Arthur
Borland, J. H.	Simcoe	Heslop, W. G.	Port Arthur
Boyd, J. M.	Nelson, B.C	Higgins, J. M.	Clinton
Bridge, D. E.	Kincardine	Holm, A. C.	Hamilton
Brouwers, M. H.	Toronto	Hopkin, R. J.	Toronto
Bruchman, M. A.	Besserabia	Howden, A. J.	Caledonia
Bunker, G. M.	Toronto	Hudson, A. S.	Preston
Burns, E. T.	Toronto	Iler, R. K.	Arner
Butler, F. C.	Toronto	Inouye, W. M.	Calgary, Alta
Campbell, E. W.	Newmarket	Jacobi, G. W.	Toronto
Campbell, W. A.	Wallaceburg	Jarman, E. R.	London
Campbell, W. S.	Elmvale	Jones, A. T.	Toronto
Canniff, F. H.	Kenora	Jones, E. W.	Brampton
Carruthers, W. E.	Dundas	Jones, S. T.	Toronto
Cartan, J. M.	Toronto	Joyner, K. J.	Stapleton, N.Y
Carter, J. R.	Kagawong	Kaminker, B.	Toronto
Catterall, J. G.	Lansing	Kelk, G. H.	Toronto
Centner, Miss B.	Toronto	Kidd, K. E.	Cookstown
Champagne, E. T.	Toronto	Kirkland, W. C.	Hamilton
Chapman, H. D.	London	Knox, J. A.	Ceylon
Chisholm, C. D.	Oakville	Knysh, M.	Toronto
Chisholm, K. T.	Oakville	Lake, F. A. G.	Toronto
Clegg, L. V.	Campbellford	Lambton, R. F.	Guelph
Cooey, D. H.	Toronto	Lamond, G. A. H.	St. Thomas
Crerar, J. R.	Toronto	Lawrence, S. N.	Sheridan
Dewdney, A. J.	Kenora	Lee, L. H.	Toronto
Dowds, W.	Toronto	Lee, Y.	Willowdale
Downing, J. A.	Toronto	Lewis, F.	Toronto
Edmonds, J. C.	Toronto	Little, J. S.	Woodstock
Emerson, J. W.	Toronto	Longwell, G. G.	Streetsville
Ferguson, J. W. S.	Seaforth	Looney, J. W.	Fort William
Ferguson, R. M.	Lindsay	Lundy, R. W.	Paris
Fotheringham, S. C.	Ruthven	McDonald, C. J.	Thornhill
Galley, E. W.	Toronto	MacKay, B. M.	Toronto
Gilchrist, E. W.	Toronto	McKay, M. P.	Bracebridge
Gladman, V. A.	Oakville	McKay, P. L.	Embro
Gowe, A. T.	Toronto	McKay, W. A.	Toronto
Graham, H. R. D.	Toronto	McLaren, J. A.	Toronto

## APPENDIX

41

Name	Home Address	Name	Home Address
McLean, J. W.	Sault Ste. Marie	Sherman, C. L.	Toronto
McMordie, R. C.	Toronto	Sims, P. O.	Thistlethorn
McNamara, J. E. G.	Campbellford	Smith, C. M.	Toronto
McVean, G. H.	Dresden	Smith, D. C.	Bracebridge
Mason, G. M.	Toronto	Smith, G. E.	Toronto
Meikle, W. D.	Oakville	Smith, W. E.	Toronto
Meyer, L. C.	Weston	Smith, W. A.	Orillia
Millard, J. R.	Toronto	Sniderman, H. A.	Toronto
Miller, S.	Egypt	Soules, R. C.	Toronto
Moore, S. B.	Toronto	Stacey, E. J.	Oshawa
Morgan, J. C.	Lindsay	Stone, C. G.	Toronto
Muench, E. A.	Friendship, N.Y.	Stone, F. R.	Phelpsston
Muir, H. J.	Fort William	Stringer, J.	Toronto
Murby, S. F.	Toronto	Strohan, A. G.	Niagara Falls, S.
Mustard, G. H.	Uxbridge	Swayze, C. H. R.	Dunville
Newbery, R. B.	Toronto	Switzer, B. W.	Sutton West
Nobbs, A. R.	Brantford	Taylor, C. R.	Toronto
Paterson, J. A.	Toronto	Thomas, J. W. E.	Campbellford
Pinkerton, W. T.	Belleville	Tocher, C. W.	Toronto
Rambo, W. L.	Hamilton	Turnbull, J. R.	Dundas
Rapey, K. H.	Toronto	Warner, F. W.	Thorold
Reed, D.	Toronto	Watson, A. L.	Toronto
Riddell, G. S.	Newton	Watts, H. L.	Toronto
Robinson, B. C. W.	Weston	Watts, T. O.	Waterloo
Roome, R. M. B.		Watts, W. A.	Toronto
Duncan, Vancouver Island, B.C.			
Rowntree, H. R.	Weston	Wearing, T. R.	North Battleford, Sask.
Rutherford, F. C.	St. Catharines	Wideman, C. R.	Markham
Sandford, H. L.	Toronto	Williams, A. R.	Toronto
Seaborn, P. M.	Moose Jaw, Sask.	Williamson, R. C.	Toronto
Seed, W. A.	Colborne	Wilson, A. L.	Toronto
Sharpe, E. R.	Toronto	Wyckoff, E. G.	Vittoria
Shedden, C. H.	Woodstock	Young, J. W.	Galt
		Zieman, W. H.	Guelph

## SECOND YEAR

Name	Home Address	Name	Home Address
Allan, M. F.	Hamilton	Davenport, J. L.	Hamilton
Anderson, C. T.	Downsview	Davison, A. W.	Brockville
Annesley, J. C.	Toronto	Davison, H. E.	Toronto
Argo, J. W.	London	Deacon, J. W.	Belleville
Armstrong, G. R.	Hamilton	de Montmorency, W. H.	Galt
Barnes, R. I. P.	Summerland, B.C.	Doidge, A. H.	Toronto
Bouckley, T.	Oshawa	Duncan, J. G.	Scarborough
Boulbee, A. H.	Toronto	Dunn, F. S.	Toronto
Brannen, J.	Toronto	Durnan, J. F.	Toronto
Brant, T. J.	Whitby	Dyment, A. E.	Toronto
Bredin, E. H.	Toronto	Dyment, J. T.	Toronto
Bullen, R. L.	Toronto	Edwards, W. H.	Markdale
Campbell, E. W. D.	Toronto	Emerson, L. P.	Toronto
Clark, G. M.	Toronto	Furber, M. B.	Mexico
Clarke, O. V.	Toronto	Geldard, P. W.	Toronto
Clarkson, W. G.	Hamilton	Glass, J. E.	Richmond Hill
Collins, J. H. A.	St. Catharines	Goss, J. M.	Toronto
Colombo, C. J.	Brantford	Gracey, H. D.	Toronto
Cunningham, G. A.	Peterborough	Grant, J. P.	Toronto
		Gray, G. M.	Coldwater

Name	Home Address	Name	Home Address
Hachnel, W. F.	Waterloo	Pyne, A. N.	Toronto
Hammond, I.	Otterville	Quinlan, E. M.	Port Hope
Hardy, I. C.	Oakville	Ray, R. W.	Toronto
Hawtrey, R. C.	Toronto	Rochereau de la Sablière, G.	Toronto
Henderson, V. L.	Hespeler	Rooke, W. A.	Toronto
Hewson, D. T.	Penetanguishene	Ross, H. C.	Toronto
Hollinsworth, V. E.	Weston	Rudder, A. L. S.	Toronto
Hopper, C. H.	Toronto	Sanofsky, S.	Calgary, Alta
Humber, C. M.	Goderich	Schlein, W.	Toronto
Hunton, J. E.	Hamilton	Scriven, M. R.	Toronto
Ing, W. S.	Toronto	Shaw, G. M.	Toronto
Irwin, L. D.	Toronto	Shields, E. M.	Hamilton
Irwin, W. D.	Whitby	Shiells, W. M.	Sault Ste. Marie
Jenkins, L. C. H.	Kitchener	Skelton, E. W.	Toronto
Jones, M. D.	Shallow Lake	Skey, H.	Toronto
Kearns, E. J.	Toronto	Smith, H. P.	Midland
Keith, J. M.	Sault Ste. Marie	Sniffen, E. W.	Toronto
Kelman, R. B.	Brantford	Strong, D. R.	Toronto
Killer, J. O.	St. Catharines	Sutherland, J. G.	Weston
Langford, K. W.	Toronto	Sutton, J. B.	Schomberg
Lord, G. R.	Peterborough	Switzer, R. J.	Orillia
McCarthy, D. F.	Toronto	Tebo, G. B.	Lefroy
McCuddy, M. H.	Moosomin, Sask	Thomson, W. A.	Whitby
MacDonald, D. F.	Toronto	Thwaites, J.	England
McKichan, D. B.	Toronto	Tupper, K. F.	Calgary, Alta
McKinney, A. D.	Toronto	Warren, H. E. P.	Toronto
McRae, D. G. W.	Toronto	Watson, W. H.	Toronto
Mather, I. O.	Brampton	Wilkinson, W. A.	Toronto
Matheson, DeL. H.	Toronto	Williamson, J. A.	Toronto
Matheson, J. G.	Embro	Wilson, F. A.	Toronto
Nimmo, H. W.	Toronto	Wilson, W. G.	Toronto
O'Brien, J. E.	Toronto	Wolstol, H. T.	Toronto
Parker, C. C.	Humber Bay	Woodside, C. W.	Calgary, Alta
Parkins, A. M.	St. Catharines	Woolson, J. M.	Toronto
Peart, G. I.	Toronto	Wright, J. D.	Toronto
Petrogannis, K. Y.	Toronto		

## THIRD YEAR

Name	Home Address	Name	Home Address
Adamson, G. S.	Orangeville	Campbell, W. M.	Toronto
Allan, D. C.	Camlachie	Carlisle, D. C.	Toronto
Archer, J. E.	Port Arthur	Chvilivitzky, J.	Russia
Barnes, L. W.	Toronto	Cockburn, L. F.	Crysler
Battye, A. R.	England	Connor, G. R.	Campbellford
Beal, G. P.	Toronto	Dill, E. W.	Toronto
Belyea, G. H. V.	St. John, N.B.	Duncan, W. A.	Toronto
Bertram, R. E.	Toronto	Edmonson, C. B.	Welland
Blasdale, B. C.	Toronto	Ellis, A. B.	Leamington
Bolton, A. E. S.	Toronto	Faber, C. W.	Toronto
Brock, J. W.	Toronto	Farah, H.	Toronto
Brooks, C. H.	Toronto	Feick, C. G. E.	Warton
Burk, C. F.	Toronto	Flintoff, A. F.	Oshawa
Burns, W. G.	Toronto	Forer, H.	Palestine
Caldwell, W. C.	Powassan	Frye, G. D.	Wallaceburg
Callan, E. J.	Vernonville	Furber, C. M.	Mexico
		Galimberti, G. M.	Toronto



Name	Home Address	Name	Home Address
Gibson, N. C.	Oakville	Martin, F. J.	Milton
Grant, A. M.	St. Catharines	Moodie, E. W.	Toronto
Grant, T. J.	Paris	Moogk, E. G.	Weston
Gray, G. M.	Toronto	Morgan, E. C.	Toronto
Grunsten, W. A.	Toronto	Morrison, J. A.	Beaverton
Hall, S. W. S.	Toronto	Morton, P. S. A.	Toronto
Hannon, Miss D. C.	Hamilton	Patterson, C. F.	Ripley
Harrington, J. C.	Weston	Peterson, R. R.	Hamilton
Hayes, R. E.	Cannington	Phipps, A. R.	Richmond Hill
Hermance, H. P.	Toronto	Pritchard, H. T.	Toronto
Hilchie, W. F.	Weston	Richardson, R. E.	Toronto
Hill, J. F.	Regina, Sask.	Robertson, R. G.	Hamilton
Holden, G. A.	Toronto	Rowland, D. A.	Toronto
Howard, L. A.	Toronto	Rowsey, C. R.	Toronto
Hunt, A. B.	London	Russell, J. H. P.	Toronto
Jeckell, W. H. R.	Dawson, Y.T.	Sanderson, E. L.	Toronto
Johnston, W. E.	St. Mary's	Scarth, W. M.	Virdee, Man
Jones, S. C.	Toronto	Scheak, H. M.	Toronto
Jones, S. M.	Brantford	Sheldon, W. D.	Galt
King, L. Y.	Stevensville	Shenstone, B. S.	Toronto
Kirkpatrick, H. J.	Toronto	Sinclair, A. E.	Woodstock
Klein, G. J.	Hamilton	Sipes, A. M.	Toronto
Laidlaw, D. S.	Toronto	Smith, G. B.	Toronto
Lazier, M. J. C.	Toronto	Smith, H. C.	Toronto
Linke, H. M.	Kitchener	Smith, H. M.	London
Little, J. G.	Trenton	Smith, T. B.	Toronto
Little, T. E.	Owen Sound	Stanford, G. E. H.	Toronto
Loscombe, V. G.	Toronto	Stephenson, H. J.	Burlington
Lowry, E. F.	Brussels	Swartman, T. C.	Waubashene
Lymburner, K. W.	Cayuga	Taber, A. W. H.	Athens
Macdonald, W. C.	Toronto	Thompson, C. P.	Toronto
MacDonald, G. L.	Brantford	Trimble, G. F.	Toronto
McGregor, H. R.	Toronto	Vigars, S. G.	Port Arthur
McIntosh, W. R.	Toronto	Weinert, I.	Toronto
McKenzie, D. J.	Toronto	Westervelt, R. A.	Clarkson
MacKinnon, C. E.	Cranbrook, B.C.	White, W. E.	Toronto
McLaren, H. D.	Ancaster	Wickham, G. E. F.	Toronto
Magnan, H. N.	Jamaica, B.W.I.	Wolfe, S. E.	Cooksville

## FOURTH YEAR

Allen, N. E.	Ingersoll	Bryan, H. H.	Harrison
Anderson, J. G.	Toronto	Burnside, R. J.	Madoc
Anderson, W.	Stratford	Carrick, J. A.	Toronto
Auld, J. R.	Beamsville	Carroll, C. J. C.	Ottawa
Auld, W. F.	Beamsville	Caruthers, C. D.	Garden Hill
Ballachey, A. G.	Toronto	Chisholm, W. D. A.	Oakville
Barr, F. G. F.	Toronto	Clapp, D. M.	Tecumseh
Bicknell, A. B.	Toronto	Coates, W. H.	Seaford
Bingham, T. E.	Georgetown	Connery, J. H.	Toronto
Bohn, L. J.	Guelph	DeLaplante, G. L.	Owen Sound
Boles, H. W.	Toronto	Dunlop, R. W.	Calgary, Alta
Braithwaite, K. H.	London	Eastwood, D. R.	Bonarlaw
Breckenridge, J. G.	Toronto	Enouy, W. G.	Toronto
Bruce, C. F. W.	Toronto	Farrell, J. B.	Toronto

Name	Home Address	Name	Home Address
Feely, M. R.	Brantford	Parker, G. H.	Guelph
Flett, D. D.	Toronto	Parkinson, C. A.	Toronto
Ford, J. S.	Toronto	Pitt, C. B.	Collingwood
Fraser, J. H.	Streetsville	Pounsett, F. H. R.	Toronto
Fraser, K. W.	Pembroke	Quance, R. P.	Delhi
Fox, J. H.	Toronto	Raymore, W. G.	Toronto
Gardner, J. K.	Toronto	Richardson, L. A.	Peterborough
Grant, A. G.	Toronto	Rickard, F. A.	Waterford
Grass, E. C.	Columbus	Roberts, G. L. B.	St. Johns, Nfld
Grundy, E.	Toronto	Robins, C. P.	Toronto
Haggert, G. J.	Ingersoll	Salter, C. J.	Clinton
Hanks, R. S.	Toronto	Sampson, F. A.	Toronto
Hargraft, W. S.	Toronto	Sankey, C. A.	Belleville
Hayward, R. E. G.	Haileybury	Saunders, H. E.	Oshawa
Heald, G. C.	Toronto	Sherk, R. M.	Humberstone
Hewitt, H. L.	Toronto	Shields, W. F.	Innerkip
Hillier, R. G.	Toronto	Shortreed, J.	Coulson
Hopper, C. M.	Toronto	Sievert, F. A.	Toronto
Howell, J. E.	Welland	Simmons, W. R.	Bracebridge
Hunter, A. F.	Toronto	Sinclair, S. K.	Toronto
Irwin, A. J.	Toronto	Spittal, W. R.	Toronto
Irwin, H. S.	Toronto	Stanley, P. G.	Toronto
Jackson, E. D.	Toronto	Suzuki, S.	Japan
Jeckell, A. W.	Toronto	Thompson, M. O.	Atwood
Jones, J. H. M.	Sault Ste. Marie	Thompson, W. A.	Belton
Killoran, J. L.	Peterborough	Thompson, W. L.	Belmont
Lalor, Miss E. M.	Toronto	Vercoc, F. H.	Toronto
Laughlin, W. H. M.	Toronto	Vernon, H.	Toronto
Lee, A. C.	Dawson, Y.T	Walters, S.	Thorold
Lorenzen, I.	St. Catharines	Watson, W. A.	Toronto
McCrone, D. G.	Toronto	Weaver, W. E.	Hespeler
McCullough, W. H.	Toronto	Weber, R. I.	Zurich
MacGill, Miss E. M. G.	Vancouver, B.C	Welland, R. W.	Galt
McMartin, C. A.	Barrie	Whaley, W.	Harriston
Martin, W. C.	Toronto	Wideman, N. E.	Markham
Morris, D. T.	Grimsby	Wilcox, B. B.	Toronto
Morrison, C. A.	Toronto	Wilkinson, A. E.	Toronto
Noble, J. S.	Cranbrook, B.C	Wilson, R. J. G.	Toronto

†Easter Term

## SUMMARY

First Year	163
Second Year	110
Third Year	110
Fourth Year	104
Total	487

## FACULTY OF HOUSEHOLD SCIENCE

## FIRST YEAR

Name	Home Address	Name	Home Address
Abbott, Miss K. H. ....	Toronto	MacDonald, Miss H. M. ....	Acton
Amys, Miss A. H. ....	Peterborough	MacDonald, Miss R. E. ....	Toronto
Brown, Miss M. R. ....	Niagara-on-the-Lake	McElroy, Miss J. D. ....	Ottawa
Bull, Miss J. B. ....	Toronto	McKinley, Miss D. J. ....	Toronto
Carveth, Miss M. A. ....	Toronto	Mittelfeldt, Miss O. V. St. Catharines	
Creed, Miss E. M. ....	Toronto	Montz, Miss M. I. ....	Guelph
Cuthbertson, Miss P. A. ....	Toronto	Oaks, Miss E. G. ....	Preston
Donaldson, Miss E. F. ....	Toronto	Parker, Miss M. C. ....	Toronto
Fallis, Miss J. E. ....	Toronto	Parmenter, Miss L. ....	Toronto
Fenn, Miss E. M. ....	Toronto	Pearce, Miss R. T. ....	Toronto
Fleury, Miss N. G. ....	Brampton	Sanders, Miss E. E. ....	St. Thomas
Gillies, Miss K. H. ....	Toronto	Saresky, Miss M. ....	Toronto
Gunn, Miss M. A. ....	Toronto	Scott, Miss L. M. ....	Toronto
Gurney, Miss F. E. ....	Toronto	Smith, Miss L. B. ....	Edmonton, Alta
Hall, Miss F. J. ....	Oshawa	Stephens, Miss M. D. ....	Toronto
Knox, Miss C. J. D. ....	Kelowna, B.C.	Stratford, Miss H. G. ....	Toronto
Logan, Miss M. M. A. ....	Niagara Falls	Thomson, Miss S. M. ....	Owen Sound
Lowrey, Miss M. E. ....	Brampton	Weekes, Miss M. M. ....	Brantford
McGubbin, Miss J. F. ....	Toronto	White, Miss M. C. ....	Toronto
		Wood, Miss H. I. ....	Toronto

## SECOND YEAR

Anderson, Miss E. ....	Toronto	Kennish, Miss M. ....	Montreal, Que
Appelbe, Miss H. M. ....	Toronto	Kitching, Miss R. ....	Thistletown
Barber, Miss A. M. ....	Burk's Falls	Lamon, Miss F. E. ....	Toronto
Barner, Miss G. M. ....	Toronto	Lewis, Miss V. B. ....	Toronto
Batcheller, Miss D. O. ....	Toronto	McIntosh, Miss H. F. ....	Toronto
Beaman, Miss E. K. ....	Essex	Purvis, Miss A. L. ....	Parry Sound
Bond, Miss R. E. ....	Toronto	Riepert, Miss E. R. ....	Toronto
Booth, Miss J. E. ....	Toronto	Shannon, Miss V. ....	Toronto
Brown, Miss J. F. ....	Toronto	Stewart, Miss M. T. ....	Toronto
Crawford, Miss M. H. ....	Toronto	Suzuki, Miss N. ....	Japan
Dalgety, Miss H. C. ....	Sombra	Tait, Miss H. M. ....	Glencoe
Davis, Miss H. J. ....	Toronto	Thompson, Miss M. J. ....	Toronto
Etigson, Miss E. I. ....	Toronto	Tindale, Miss M. D. ....	Toronto
Goring, Miss W. ....	Hamilton	Tocher, Miss K. ....	Sunderland
Grout, Miss M. E. ....	Toronto	*Webster, Miss L. D. N. ....	Toronto
Haight, Miss D. C. ....	Sudbury	Wilson, Miss H. R. ....	Toronto
Harrison, Miss J. ....	Mimico	Wright, Miss M. H. ....	Toronto
Hilchie, Miss M. O. ....	Toronto		

## THIRD YEAR

Anglin, Miss F. G. ....	Toronto	MacKinnon, Miss R. ....	St. Catharines
Clarke, Miss D. W. ....	Harrow	Service, Miss F. A. ....	China
Davies, Miss C. I. ....	Toronto	Snider, Miss O. H. ....	Toronto
Gear, Miss W. M. ....	Orton	Wales, Miss R. E. ....	Toronto
Gunton, Miss M. H. ....	Simcoe	Walker, Miss H. L. ....	Toronto
Kaake, Miss M. J. ....	Toronto	Whyte, Miss M. E. ....	Toronto
Lacey, Miss H. ....	Chesterville	Young, Miss M. E. ....	Toronto
McIntyre, Miss U. M. ....	Grand Valley	Young, Miss W. F. ....	Minesing

\*Michaelmas Term

## FOURTH YEAR

Name	Home Address	Name	Home Address
Coates, Miss B. W. . . . .	Japan	Nicol, Miss A. J. . . . .	Madoc
Moffatt, Miss W. M. . . . .	Toronto	Somers, Miss I. . . . .	Toronto
Montgomery, Miss F. M.		Thomson, Miss M. M. . . . .	London

Glen Ellyn, Ill

## OCCASIONAL STUDENTS

Denton, Miss M. E. . . . .	Toronto	**Webster, Miss L. D. N. . . . .	Toronto
Elliott, Miss E. C. . . . .	Toronto		

\*\*Duplicate Registration

## SUMMARY

First Year. . . . .	39
Second Year. . . . .	34
Third Year. . . . .	16
Fourth Year. . . . .	6
Occasional Students. . . . .	3
Total. . . . .	<hr/> 98

## ONTARIO COLLEGE OF EDUCATION

## STUDENTS REGISTERED FOR ORDINARY HIGH SCHOOL AND SPECIALISTS' CERTIFICATES

Name	Home Address	Name	Home Address
Adams, Miss M. E. H.	Alliston	Dean, G. F.	London
Adsett, C.	Rockwood	de Laplante, Miss F.	Toronto
Agnew, Miss H. G.	Winchester	de Moulpied, Miss H. M.	Kingston
Alderson, G. K. D.	Ingersoll	Dermody, V. A.	Hamilton
Allison, Miss C. M.	Morewood	Dickson, Miss J. S.	Niagara Falls
Anderson, Miss R. M.	Toronto	Dirstein, Miss R. N.	Elmwood
Argue, Miss H. M.	Ottawa	Dobell, Miss M. M.	Toronto
Armstrong, H. J.	Ottawa	Dodds, Miss H. M.	Hamilton
Armstrong, Miss H. S. C.	Warkworth	Doidge, W. G.	Toronto
Armstrong, Miss J. L.	Keene	Donnell, A. A.	Galt
Bailey, Miss M. A. M.	Lakefield	Donovan, N. P.	Ottawa
Ball, Miss M. A.	New Liskeard	Dougall, Miss M. F.	Oshawa
Bedford-Jones, Miss M. C.	Perth	Drohan, P.	Brudenell
Berry, Miss S. L.	Kingston	Dryden, Miss M. L.	Brooklin
Billings, Miss B. B.	Lyn	Duffy, Miss G. N.	Hamilton
Blair, H. K.	North Cower	Duncan, Miss I. M.	London
Brennan, T. W.	Toronto	Durrant, J. E. D.	Blenheim
Brett, Miss E. B.	Rosemont	Dwyer, Miss M. H.	Toronto
Brett, Miss H. O.	Steenburg	Eastman, C. E.	Thedford
Briffett, Miss F. B.	Rosedale, Nfld.	Edwards, Miss E. J.	Winchester
Brown, A. F.	Owen Sound	Elliott, Miss D. E.	Toronto
Brown, F. L.	Melbourne	Elliott, Miss E. L. D.	Carleton Place
Brown, Miss I. C.	Brockville	Elliott, Miss G. S.	Tweed
Brown, P. E.	Sebringville	Ellis, Miss O. E.	Toronto
Bruley, J. O.	Cache Bay	Elton, V. T.	Preston
Bucke, Miss F. I.	St. Thomas	Fallona, Miss M. M.	London
Butcher, Miss D. E.	Toronto	Farmer, Miss K.	Combermere
Caldwell, Miss I. H.	Limehouse	Fee, J. R.	Pictou
Campbell, G. T.	Toronto	Ferguson, Miss D. M.	Chatham
Campbell, Miss M. D.	Ripley	Ferrier, Miss G. R.	Kincardine
Carkner, Miss M.	Kenmore	Fowler, T. O. W.	Toronto
Cartwright, Miss M. de C.	Milton West	Fraser, C. C.	Glen Sandfield
Chalk, H. H.	Toronto	Fraser, Miss J. M.	Morris, Man.
Cliff, Miss B. G.	Portsmouth	Galbraith, Miss M.	Milton
Coburn, Miss L. M.	Toronto	Galvin, Miss N. M.	Toronto
Colbeck, L. H.	Grand Valley	George, Miss M. S.	Troy
Conn, Miss E. M.	Toronto	Goheen, R. W.	Port Hope
Cooney, Miss M. G.	St. Catharines	Giffin, Miss E. P.	Cannington
Corran, Miss A. M.	Lindsay	Groat, D. L.	Norwich
Coughlin, Miss M. W.	Toronto	Groat, F. R.	Norwich
Coumans, Miss C. C.	Chepstowe	Groat, M. E.	Norwich
Coutts, Miss M. J.	Hamilton	Hallett, Miss G. A.	Ottawa
Crighton, H. N.	Toronto	Hanna, Miss M. W.	Port Carling
Crope, Miss E. A.	Simcoe	Hannan, Miss C. C.	Toronto
Cross, Miss D. E.	Ottawa	Hanson, Miss N. L.	Dixon Corners
Currey, Miss C. I. E.	Woodstock	Harding, R. C.	Ettrick
Dalziel, Miss J. M.	Woodbridge	Harvie, Miss M. K.	Orillia
Danford, Miss F.	Spring Brook	Hazlewood, Miss R. M.	Grimby
Davidson, Miss M. E. G.	Mimico Beach	Helper, Miss M.	Toronto
		Hill, Miss F.	Beachburg

Name	Home Address	Name	Home Address
Hilliker, Miss R. M.	Collingwood	MacRostie, Miss A. C.	Brampton
Hills, Miss R. H.	Dublin	Maas, Miss D. R. E.	Toronto
Hipwell, Miss A. P.	Alliston	Maitland, Miss J. A. B.	Toronto
Honey, Miss M. E.	Cainsville	Marlatt, Miss V. A.	Grimsby
Horton, Miss M. E.	Toronto	Martin, Miss A. M.	Chatham
Horwood, W. P.	Toronto	Martin, T. H.	Weston
Hudson, Miss E. S.	Preston	Martyn, Miss M. M.	Ripley
Humphries, Miss J. B.	Glencoe	Masales, R.	Toronto
Irwin, Miss H. M.	Campbellford	Michell, Miss V.	Toronto
Iverson, Miss E.	London	Miller, Miss H. C.	Ottawa
Johnston, E. M.	Collingwood	Miller, Miss M. I.	Monkton
Johnston, Miss I. M.	Woodford	Miller, Miss S. G.	Kemptville
Jones, J. R.	Brighton	Mitchell, C. G.	Hamilton
Jones, Miss M. F.	Caledonia	Mitchell, Miss E. G.	St. Mary's
Kelso, Miss U.	Stratford	Mix, I. W.	Ottawa
Kennedy, Miss E. I.	Maxville	Moore, Miss K. M.	Queensville
Kincaide, Miss F. M.	Unionville	Morrow, Miss D. B.	Toronto
Kirkland, Miss M. D.	Almonte	Mowat, Miss J. I.	Acton
Knight, D.	London	Mowat, Miss M. C.	Acton
Krug, Miss K. J.	Chesley	Neilson, Miss A. L.	Stella
Laborde, Miss M. C.	Brantford	Norris, Miss M. K.	Ottawa
La Brosse, J. R.	Plantagenet	Oaks, Miss I. M.	Preston
Lane, Miss A. M.	Orangeville	Oatway, Miss O. I.	Smith's Falls
La Piere, Miss M. E.	Detroit, Mich.	O'Connell, Miss M. A.	Peterborough
Lee, E. G.	Toronto	O'Donnell, B.	Toronto
Leggett, Miss F. L.	Newboro	O'Grady, Miss R. F.	Toronto
Leitch, J. D.	Hamilton	Orr, E. A.	Belleville
Lewis, Miss E. J.	Smiths Falls	Page, R. R. H.	Toronto
Lewis, P. O.	St. Thomas	Pallett, Miss S. B.	Islington
Lewis, Miss M. C.	Smiths Falls	Parker, Miss M. F.	Caledonia
Lockie, Miss I. M.	Zephyr	Parson, Miss G. M.	Springfield
Loyst, Miss M. H.	Napanee	Paterson, R. E.	Rodney
McCallum, C. M.	Dutton	Patterson, C. S.	Toronto
McCarthy, Miss H. J.	Dixie	Patterson, Miss E. M.	Paris
McCoig, Miss L. J.	Chatham	Perrott, Miss L. S.	Alliston
McCubbin, Miss C. A.	Chatham	Pike, H.	Stouffville
MacEachern, F.	Eldon	Pinder, Miss M. M.	Arthur
McFaul, Miss E.	Kingston	Powell, J. C.	Drayton
McGahey, J. E.	Toronto	Quinlan, Miss G. J.	Port Hope
MacGillivray, J. R.	Guelph	Reid, Miss H. M.	Belleville
McIntyre, Miss L. A.	Powassan	Richmond, Miss J. C.	Perth
McKeever, Miss M.	Ottawa	Ricker, Miss V. M.	Canfield
McKinnon, Miss F. C.	Maxville	Ritchie, Miss J. H.	Toronto
MacLachlan, Miss A. M.	Williamstown	Roberts, Miss I. L.	Toronto
McLauchlin, Miss B. C.	Alvinston	Rose, Miss E. J.	Port Perry
MacLean, Miss F. C.	Moose Creek	Ruth, F. S.	Toronto
MacLean, Miss J. F.	Ormond	Ruttan, W. G.	Toronto
McLean, Miss M. K.	Perth	Sandy, Miss D. A.	Omenece
MacLellan, Miss M. J.	Claremont	Schnick, F. W.	Smithville
MacLennan, Miss B. M.	Perth	Scott, Miss M. M.	Ingersoll
MacLennan, J. W.	Ottawa	Scott, Miss O. J.	Toronto
McLeod, N.	Southampton	Segsworth, Miss G. M.	Fort Frances
McManus, Miss M. P.	St. Thomas	Service, Miss E. W.	China
McMullen, Miss G. C.	Midland	Shamblau, Miss V. P.	London
McNally, Miss K. E.	Utterson	Sharpe, B. W.	Toronto
Macpherson, Miss M. C.	London	Shaver, K. J.	Toronto

Name	Home Address	Name	Home Address
Sheehan, C. J.	Toronto	Van Allen, K. C.	Belleville
Shel, Miss L. N. M.	Sault Ste. Marie	Vasey, Miss R. J.	Deloraine, Man.
Simmons, Miss E. M.	New Liskeard	Waddell, W. L. M.	Ballinafad
Simpson, F. R.	Port McNicoll	Wales, Miss M. E.	Napanee
Sinclair, Miss M. E.	Aultsville	Walsh, Miss M. M.	Lindsay
Skinner, E. W.	Toronto	Ward, Miss D. E.	Palmerston
Smart, Miss D. A.	Toronto	Watson, K. P.	Sarnia
Smeaton, Miss W. H.	Niagara Falls	Watson, S. A.	Toronto
Smith, Miss J. M.	Ottawa	Watson, W. R.	Paris
Smith, L. A.	Uxbridge	Waugh, F. D. R.	Lansing
Stedman, Miss E. M.	Camden East	Wegenast, Miss I. S.	Waterloo
Steer, Miss F. E.	London	Welsh, Miss M. M.	Maxville
Stiver, Miss D. A.	Unionville	White, M. F.	Seagrave
Stock, Miss M. L.	Tavistock	Wiancko, Miss F. H.	Toronto
Stubbs, Miss B. E.	Toronto	Wickett, Miss I. J. T.	Toronto
Sutton, Miss E. E.	Toronto	Williams, Miss D. A.	Kingston
Tangney, Miss H. M.	Lindsay	Wilson, Miss D. F. N.	Tilbury
Teskey, Miss M.	Oakville	Wilson, Miss E. D.	Seaford
Theobald, J. C.	Peterborough	Wilton, Miss J. B.	Kingston
Thomas, L. S.	Toronto	Wood, Miss D. U.	Toronto
Tilden, G. A.	Mount Brydges	Wood, Miss M. H.	Toronto
Toole, H. A.	Port Dover	Wooldridge, M. M. B.	Oakwood
Toye, Miss G. E.	Toronto	Wootton, Miss H. E.	Mimico
Turnbull, Miss J.	Brussels	Zeron, Miss O. B.	Morrisburg
Turner, H. A.	Toronto	Ziegler, W. T.	Toronto
Urquhart, Miss E. A.	Martintown		

## STUDENTS REGISTERED FOR SPECIALISTS' CERTIFICATES ONLY

Bole, C. L.	Woodville	Hislop, Miss E. E.	Toronto
Brogden, R. C.	Stratford	Irvine, Miss A. M.	Niagara-on-the-Lake
Buck, C. S.	London	Janes, Miss D. L.	London
Burleigh, Miss N.	Stella	Kastner, Miss E. C.	Toronto
Cameron, M.	Fort Frances	Kendrick, W. K. F.	Ottawa
Challinor, J. L.	Chatham	McCormack, Miss M. I.	Kingston
Cronin, Miss C. D.	Toronto	Mitchell, Miss H. B.	Watford
Edgar, Miss M.	St. Thomas	Plunkett, Miss M. B.	Havelock
Elliott, Miss O. E.	Toronto	Rendall, S. D.	Ayr
Ferguson, W. S.	Toronto	Roberts, R. H.	London
Forsyth, E.	Toronto	Sparling, C. C.	Meaford
Gilkinson, Miss M. A.	Wingham	Stevens, V. S.	Toronto
Grange, Miss H. A.	Napanee	Tolmie, E.	Woodville
Haines, Miss R. W.	Newmarket	Wert, Miss A. G.	Avonmore
Hammell, Miss E. E. M.	Beeton	Wheeler, H. A.	London
Henderson, O. J.	Bowmanville	White, O. R.	Toronto
Hildyard, E.	Holstein		

## STUDENTS REGISTERED FOR ORDINARY CERTIFICATES IN HOUSEHOLD SCIENCE

Dubs, Miss L. I.	Thamesville	Martin, Miss F. R.	Toronto
Halliday, Miss J. M.	Toronto	Rinker, Miss L.	Chantler
Johnston, Miss O. I.	Peterborough	Standen, Miss J.	Barrie
Kennedy, Miss H. E.	Princeton	Sullivan, Miss F. M.	Belleville

## STUDENTS REGISTERED FOR THE BACHELOR OF PEDAGOGY DEGREE

Name	Home Address	Name	Home Address
Ault, O. E.	Ottawa	McAndrew, H. O.	Toronto
Ayer, H. M.	Toronto	McCann, Miss D.	London
Baker, V. E.	Ottawa	McEwen, F. A.	Toronto
Ball, W. N.	Walkerville	McKay, W.	Toronto
Bates, D. W.	Toronto	McKechnie, J. G.	Regina, Sask.
Beneteau, A. J.	Sandwich	McLean, J. M.	Vancouver, B.C.
Boismier, Miss R.	Winnipeg, Man.	McNabb, A. P.	Toronto
Brown, G. A.	Prince Albert, Sask.	MacNaughton, R. M.	Newmarket
Brown, Miss U. K.	Belleville	McWhorter, T. A.	Toronto
Bruce, V. N.	Ottawa	Marr, G. J.	St. John, N.B.
Buffam, Miss M. C. W.	Toronto	Marshall, W. A.	Toronto
Caldwell, A.	Cornwall	Martin, A. A.	Toronto
Carlton, W. H.	Toronto	Masterton, R. B.	Kamloops, B.C.
Class, H. E.	Glencoe	Melady, T. S.	Stratford
Cocks, A. W.	Victoria, B.C.	Michell, D. S.	Winnipeg, Man.
Cowling, T.	Toronto	Mikel, G. R.	Ottawa
Cutler, I.	Bracebridge	Mole, W. H.	New Toronto
Davidson, Miss A. M.	Toronto	Muir, G.	Toronto
DeLaporte, Miss L. H.	Toronto	Nicholson, C. L.	Toronto
Dickson, Miss H. M.	Toronto	Ogle, W.	Port Hope
Dickson, Miss L. I.	Toronto	Overend, W. J.	London
Duprau, C. R.	Ottawa	Pakenham, F. R.	Toronto
Easson, M.	Ottawa	Peacock, A. E.	Moose Jaw, Sask.
Elliott, H. J.	Toronto	Pearson, G. A.	Walkerville
Evans, E. S.	Dunaville	Petrie, Miss M.	Toronto
Evans, G. E.	Toronto	Pound, G. S.	Whitewood, Sask.
Ewing, J. M.	Vancouver, B.C.	Powell, C. E.	Melbourne
Fergusson, G. A.	Vancouver, B.C.	Prosser, T.	Toronto
File, R. R.	St. Catharines	Prueter, H. J.	Toronto
Fitch, J. H.	Truro, N.S.	Ramsay, J. A.	Toronto
Forman, J. H.	Toronto	Ricker, H. E.	North Bay
Fraser, A. D. R.	Windsor	Roberts, W. F.	Toronto
Fydel, M. R.	Toronto	Ross, A. M.	Toronto
Gibson, J. A.	Toronto	Russell, J. T. H.	Toronto
Gillespie, J.	Toronto	Scanlan, J. V.	Toronto
Graham, E. H.	Ingersoll	Smith, F. P.	Pictou
Gray, A. S.	Toronto	Smith, W. F.	Brampton
Green, W. H. H.	Sudbury	Smith, W. R.	Vancouver, B.C.
Hadden, A. T.	Vancouver, B.C.	Spence, F. A.	Toronto
Hardy, J. H.	Perth	Spragge, G. W.	Toronto
Henry, L. J.	Toronto	Stewart, W. J.	Ottawa
Hoag, J. P.	Toronto	Stothers, C. E.	Toronto
Hoffer, G. W.	London	Tacon, P. H.	Kitchener
Houghton, W. M.	Regina, Sask.	Tanton, J.	St. Mary's
Howitt, C.	Toronto	Temple, J. B.	Toronto
Hubble, Miss F. E.	Schumacher	Titus, L. F.	Saskatoon, Sask.
Hunter, A. C.	Toronto	Waterston, J. G.	E. St. Louis, Ill.
Isbister, A. A.	Toronto	Welsh, R. S.	Toronto
Keene, J.	Sarnia	Wightman, K. S.	Peterborough
Kennedy, G. N.	Toronto	Wilder, Miss M. E.	Toronto
Kenyon, Miss A. K. E.	Toronto	Wilson, H. S.	Weston
Ketchum, P. A. C.	Port Hope	Younger, Miss R. E.	Regina, Sask.
Kinton, T. L. D.	Toronto		



## SUMMARY

Students Registered for Ordinary High School and Specialist Certificates .....	262
Students Registered for Specialist Certificates only .....	33
Students Registered for Ordinary Household Science Certificates .....	8
Students Registered for Bachelor of Pedagogy Degree .....	105
	<hr/>
	408

## FACULTY OF FORESTRY

## FIRST YEAR

Name	Home Address	Name	Home Address
Andrews, G. S. . . . .	Elgin, Man	MacKenzie, J. T. . . . .	St. Stephen, N.B.
Barnes, A. S. L. . . . .	Toronto	McLean, J. D. . . . .	Richmond Hill
Catto, A. T. . . . .	Toronto	Orr, H. V. . . . .	Toronto
Goodison, J. C. . . . .	El Paso, Texas	Simpson, L. . . . .	Elmvalc
Graham, R. T. G. . . . .	Hamilton	Sonley, G. R. . . . .	Uxbridge
Grainger, E. E. . . . .	Toronto	Start, W. D. . . . .	Curries
Gray, D. W. . . . .	Gardenvale, Que	Sylvester, A. T. . . . .	Stratford
Hardy, J. C. M. . . . .	England	Wesley, S. . . . .	Toronto
Hipwell, M. E. . . . .	Bond Head	Wheatley, A. B. . . . .	Sarnia
Leman, A. W. . . . .	Toronto	Wiley, F. N. . . . .	St. Catharines
MacBean, A. P. . . . .	Medicine Hat, Alta		

## SECOND YEAR

Addison, P. . . . .	Toronto	Hatch, F. A. . . . .	Eden
Bastock, C. H. . . . .	England	Leslie, A. . . . .	Morell, P.E.I
Boultsbee, R. . . . .	Toronto	Matthews, J. B. . . . .	Weston
Day, C. W. R. . . . .	Toronto	Plahte, F. M. . . . .	Norway
Francis, S. H. . . . .	Sherbrooke, Que		

## THIRD YEAR

Adamson, M. A. . . . .	Humberside	McCraw, W. E. . . . .	Toronto
Goodall, R. F. . . . .	York Mills	McLaren, D. . . . .	Toronto
Heimbürger, C. C. . . . .	Finland	Parker, D. M. . . . .	Humberside
Johnson, J. W. . . . .	England	Seheult, L. R. . . . .	Trinidad
Kelly, T. W. . . . .	Islington	Teasdale, J. A. . . . .	Massey

## FOURTH YEAR

Connor, L. L. . . . .	Ottawa	Putnam, M. M. . . . .	Merrickville
Gimby, W. E. . . . .	Sault Ste. Marie	Steele, W. E. . . . .	Almonte
Higgins, W. A. . . . .	Toronto	Ussher, R. D. . . . .	Toronto
McCausland, H. L. . . . .	Bay City, Mich	Ward, E. L. . . . .	Toronto

## SPECIAL STUDENT

Faber, W. O. . . . .	Holland
----------------------	---------

## SUMMARY

First Year . . . . .	21
Second Year . . . . .	9
Third Year . . . . .	10
Fourth Year . . . . .	8
Special Student . . . . .	1
	<hr/> 49

## FACULTY OF MUSIC

## FIRST YEAR

Name	Home Address	Name	Home Address
Bonney, Miss M. R. . . . .	Toronto	Olstad, E. H. . . . .	Toronto
Granatstein, Miss N. . . . .	Toronto	Piette, D. R. . . . .	Toronto
Halperin, B. . . . .	Toronto	Procter, A. E. . . . .	Toronto
Lewis, E. S. . . . .	Hamilton	Scroggie, Miss A. D. . . . .	Guelph
Murrode, Miss M. . . . .	Toronto	Williamson, Miss N. M. . . . .	Kingston

## SECOND YEAR

Ashbridge, Miss W. E. . . . .	Toronto	McKenzie, Miss R. . . . .	Leamington
Densem, C. H. . . . .	Toronto	Mitchell, Miss I. G. . . . .	Hamilton
Duff, R. . . . .	Toronto	Moore, Miss C. B. . . . .	Toronto
Gidley, Miss M. E. . . . .	Leamington	Murphy, Miss C. J. . . . .	Toronto
Jones, T. G. . . . .	Fort William	Rodgers, C. J. . . . .	Toronto
Keller, Miss H. M. . . . .	Markham	Smith, Miss E. M. . . . .	Toronto
Kelley, K. G. . . . .	Ventnor, N. J.	Thompson, W. M. . . . .	Hamilton
McBain, Miss L. M. . . . .	Toronto	Walton, Miss B. E. . . . .	Toronto
McCarthy, Miss M. . . . .	Toronto	Wibby, Miss M. W. . . . .	Toronto
McHugh, M. J. . . . .	Toronto		

## THIRD YEAR

Boyce, W. T. E. . . . .	Hamilton	Hawke, H. W. . . . .	Toronto
Burke, Miss R. M. . . . .	Toronto	Hayton, Miss A. B. . . . .	Vancouver, B.C.
Caistor, Miss F. M. . . . .	Tavistock	Hunt, Miss D. B. . . . .	Toronto
Chinn, Miss C. A. . . . .	Toronto	Marshall, Miss M. H. . . . .	Guelph
Curtis, Miss A. . . . .	Bronte	Stephens, F. W. . . . .	Toronto
Dickinson, Miss R. W. J. . . . .	Port Hope	Sutton, F. . . . .	Peterborough
Fenwick, G. R. . . . .	Hamilton	Willis, Miss N. E. . . . .	Vancouver, B.C.
Goodwin, F. E. . . . .	Toronto		

## DOCTOR OF MUSIC

Robinson, R. C. . . . .	Belmont, Mass	Wilson, G. A. . . . .	Brooklyn, N.Y.
-------------------------	---------------	-----------------------	----------------

## OCCASIONAL STUDENT

Clegg, L. V. . . . .	Campbellford
----------------------	--------------

## SUMMARY

First Year. . . . .	10
Second Year. . . . .	19
Third Year. . . . .	14
Candidates for Doctor of Music. . . . .	2
Occasional Student . . . . .	1
	<hr/>
	46

## SCHOOL OF GRADUATE STUDIES

## CANDIDATES FOR PH.D.

Name	Home Address	Name	Home Address
Archibald, F. M.	.....Sarnia	Krieger, Miss C.	.....Toronto
Baker, W. F.	.....Crystal City, Man.	McCullough, W. S.	.....Toronto
Barnes, C.	.....Leeds, Eng.	MacDonald, Miss E. M.	.....Toronto
Bayley, C. H.	.....Bridgetown, B.W.I.	MacKay, H. H.	.....Toronto
Bell, L. V.	.....Victoria, B.C.	McLay, A. B.	.....Toronto
Bowie, D. J.	.....Toronto	McLeod, J. H.	.....Esterhazy, Sask.
Brown, G. G.	.....Toronto	McQuarrie, W. C. H.	.....Easton, Pa.
Carmichael, Miss M. F.	.....Toronto	Marshall, H.	.....Ottawa
Chaikoff, I. L.	.....Toronto	Maynard, J. E.	.....Deloraine, Man.
Clare, N. D.	.....Neepawa, Man.	Morrison, Miss M. M.	.....Halifax, N.S.
Clark, C. N.	.....Vancouver, B.C.	Mossman, D. D.	.....Coaticook, Que.
Cohen, Miss E.	.....Toronto	Mounce, Miss I.	.....Ottawa
Cosgrave, G. P.	.....Winnipeg, Man.	Mulligan, M. J.	.....Windsor
Cousland, K. H.	.....Toronto	Mumford, W. B.	.....England
Cryer, J.	.....Charing Cross	Niven, C. D.	.....Scotland
Darker, G. D.	.....Toronto	Perold, J. G.	.....Toronto
Dauphinee, J. A.	.....New Westminster, B.C.	Plummer, W. G.	.....England
Dickie, Miss D. J.	.....Calgary, Alta.	Potter, W. A.	.....Toronto
Dilworth, H. M.	.....Toronto	Quinlan, Miss F. M.	.....Toronto
Dobson, W. P.	.....Toronto	Rebbeck, J. W.	.....Vancouver, B.C.
Dumbar, Miss V. E.	.....Vancouver, B.C.	Reid, Miss B. M.	.....London
Durnford, A.M.I.W.A.	.....Hyde Park	Rickaby, H. C.	.....Orono
Evans, W. W.	.....Toronto	Ridout, Miss J. H.	.....Toronto
Farncomb, F. J.	.....Toronto	Rioch, Miss M. G.	.....Kenora
Folley, K. W.	.....Lanigan, Sask.	Sanderson, J. O. G.	.....Medicine Hat, Alta.
Graham, A. R.	.....Stc. Anastasie, Que.	Scott, R. B. Y.	.....Toronto
Graham, W. E.	.....Vancouver, B.C.	Silverthorne, L. N.	.....St. Thomas
Guyatt, B. L.	.....Toronto	Simpson, W. W.	.....Burnaby, B.C.
Harkness, W. J. K.	.....Toronto	Sims, H. des B.	.....Thistletown
Hart, H. R. L.	.....Perth	Sparling, E. M.	.....Toronto
Hart, J. L.	.....Toronto	Squair, Miss M. R.	.....Toronto
Hart, N. C.	.....London	Stantial, Miss H.	.....Melrose, Mass.
Hilborn, H. W.	.....Toronto	Sweitzer, C. W.	.....Kitchener
Ireton, H. J. C.	.....Perth	Taylor, N. S.	.....England
Isserman, F. M.	.....Toronto	Thomson, K.	.....Strathroy
Jack, J. C.	.....Toronto	Townshend, A. S.	.....Clinton
Jephcott, C. M.	.....Toronto	Van Camp, J. L.	.....Pincher Creek, Alta.
Johnson, H.	.....Winnipeg, Man.	Walker, A. R.	.....London
Johnston, Mrs. M. M.	.....Toronto	Walters, G. T.	.....Calgary, Alta.
Jones, I. W.	.....Edmonton, Alta.	Wilhelm, J. O.	.....Saskatoon, Sask.
Kelly, S. F.	.....Toronto	Willison, R. S.	.....Goodwood
Kemp, H. R.	.....Toronto	Wingfield, A. H.	.....Hamilton
Kerr-Lawson, D. E.	.....Toronto	Winnett, F. V.	.....Oil Springs
King, G. B.	.....Islington		
Knechtel, M. U.	.....Hanover		

## CANDIDATES FOR M.A.

Name	Home Address	Name	Home Address
Adams, Miss M. E. H.	.....Alliston	Hambleton, A.	.....Toronto
Allin, Miss E. J.	.....Blackwater	Hamilton, A. D. F.	.....Toronto
Ball, W. V.	.....Kingston	Hamilton, Miss C. R. W.	.....Scotland
Barber, W. A.	.....Toronto	Hamilton, J. M.	.....Mt. Albert
Barnstead, Miss E. G.	.....Halifax, N.S.	Hanna, Miss L.	.....Toronto
Baxter, C. A.	.....Thamesville	Hosie, R. C.	.....Toronto
Beccroft, E. A.	.....Whitby	Huband, A. R.	.....Ottawa
Bell, J. W.	.....Toronto	Irvine, W. A.	.....Toronto
Berkeley, Miss A. A.	.....Nanaimo, B.C.	Irving, J. A.	.....Drumbo
Birney, A. E.	.....Vancouver, B.C.	Jameson, A. E. C.	.....Toronto
Black, Miss G. F.	.....Toronto	Jenking, Miss R. I.	.....Toronto
Bond, L. B.	.....Aurora	Johnson, Miss J. E.	.....Toronto
Breeze, W. S. W.	.....Chatsworth	Johnston, E. M.	.....Collingwood
Brett, Miss E. B.	.....Rosemount	Keens, Miss C. H.	.....Toronto
Brown, Miss A. J.	.....Toronto	King, C. A.	.....Tugaske, Sask.
Bullen, Miss V. E.	.....Toronto	Kingston, E. F.	.....Toronto
Cameron, Miss G. L.	.....Winnipeg, Man.	Lawson, J. S.	.....Guelph
Caven, W. R.	.....Toronto	Leslie, Mrs. S. W.	.....Toronto
Chappell, Miss M. H.	.....Japan	Little, W. J.	.....Barrie
Choi, Y. O.	.....Korea	Lowden, J. A.	.....Toronto
Coatsworth, Miss H. R.	.....Toronto	Lowther, A. A.	.....Toronto
Colclough, B. P.	.....Toronto	Luxton, G. N.	.....Hamilton
Cole, A. F. W.	.....New Liskeard	Lyall, Miss J. E.	.....Toronto
Collins, W. T.	.....Chester, Mass.	McConnell, W. F.	.....Toronto
Cook, R. S.	.....Brantford	McDonald, Miss M. C. M.	.....Toronto
Cooper, R. F.	.....England	MacFadyen, D. A.	.....Toronto
Copus, Miss M. A.	.....Stratford	McGillivray, D. J.	.....Whitby
Cosens, G. G.	.....Toronto	McKay, D. D.	.....Toronto
Cotton, Miss L. H.	.....Colborne	McKenzie, R. A.	.....Galt
Coughlin, H. P.	.....Toronto	McLeod, G. P.	.....Toronto
Coulthard, H. S.	.....Toronto	Mackinney, G.	.....England
Crawford, M. F.	.....Thedford	Maguire, Miss L. E.	.....Edmonton, Alta.
Currie, C. M.	.....Smith's Falls		
Dawson, P. W.	.....Toronto	Mahon, J. A.	.....Guelph
Djang, W. B.	.....China	Manuel, J.	.....Sault Ste Marie, Ont.
Dolan, L. J.	.....Toronto	Martin, P. J. J.	.....Pembroke
Drysdale, H. R.	.....Rochester, N.Y.	Mather, W. B.	.....Weston
Duff, D. C. B.	.....Toronto	Middleton, A. H.	.....Toronto
Duff, G. L.	.....Hamilton	Mills, W. J. P.	.....Toronto
Feasby, W. J.	.....Toronto	Milne, W. S.	.....Toronto
Fitch, Miss M. A.	.....Toronto	Moulton, C. A.	.....Toronto
Flaherty, J. F.	.....Alton	Mustard, W. M.	.....Scarborough Bluffs
Forward, Miss D. F.	.....Iroquois	Needler, A. W. H.	.....Toronto
Freedman, J.	.....Toronto	Ness, Miss M. E.	.....Ottawa
Gerrie, W.	.....Brantford	Newby, M. T.	.....Toronto
Givens, Miss M. B.	.....Toronto	Newell, Miss M. A. G.	.....Neepawa, Man.
Gosse, R. E.	.....Vetites, Nfld.		
Graburn, A. L.	.....Toronto	O'Connor, Miss M. C.	.....Toronto
Graydon, Miss A. E.	.....Toronto	Oxburn, R. H.	.....Guelph
Groat, D. L.	.....Norwich	Pall, G.	.....Winnipeg, Man.
Hall, C. H.	.....Toronto	Parker, Miss J. A.	.....Humberside P.O.

Name	Home Address	Name	Home Address
Paton, R. W. ....	Toronto	Stark, H. A. ....	Toronto
Perkin, L. L. ....	Toronto	Steenburgh, W. E. ....	Havelock
Perrie, D. K. ....	Wingham	Stewart, Miss J. ....	Shawville, Que.
Phelan, Miss M. J. ....	Guelph	Stogdill, C. G. ....	Toronto
Pritchard, A. L. ....	Toronto	Taylor, H. D. ....	China
Rae, Miss J. ....	Toronto	Thomson, A. ....	China
Rawson, D. S. ....	Goodwood	Twiss, E. O. ....	Toronto
Reed, Miss E. R. L. ....	Australia	Unwin, G. H. ....	Guelph
Reid, W. H. ....	Belleville	Vanderburgh, F. R. ....	Maple
Robertson, A. D. ....	London	Walker, F. N. ....	Toronto
Rogers, K. H. ....	St. James, Man.	Walton, Miss H. ....	Toronto
Ross, Miss M. A. ....	Halifax, N.S.	Watkins, J. B. C. ....	Norval Station
Ryan, J. B. ....	Hamilton	Waugh, B. P. ....	St. Mary's
Shaw, Miss E. B. ....	Guelph	Weber, J. J. ....	Toronto
Shiao, S. ....	China	Wells, D. C. ....	Toronto
Skinner, Miss A. K. ....	Simcoe	Westman, Miss M. E. ....	Toronto
Smart, J. D. ....	Brampton	Wilson, Miss A. N. ....	Somenos, B.C.
Smith, L. A. ....	Uxbridge	Winters, P. F. ....	Winkler, Man.
Soskin, S. ....	Toronto	Ziegler, Miss O. I. ....	Toronto
Sparks, H. I. M. ....	Toronto		

## GRADUATE STUDENTS

Anderson, Miss M. P. ....	Toronto	King, R. H. ....	Toronto
Austin, Miss M. I. ....	Toronto	Lajeunesse, E. J. ....	Toronto
Balch, R. E. ....	Guelph	McDonald, W. E. ....	Glencoe
Barbour, A. D. ....	Toronto	McGeachy, Miss M. A. ....	Hamilton
Barry, Miss M. D. ....	Toronto	McGillivray, J. R. ....	Guelph
Beatty, Miss R. ....	Toronto	Matthews, N. W. ....	Toronto
Behanan, K. T. ....	India	Meagher, N. J. ....	Toronto
Bell, H. J. ....	Atherley	Michalson, Miss E. ....	Toronto
Blakey, Miss D. ....	Vernon, B.C.	Morrow, Miss D. B. ....	Toronto
Bradley, J. H. ....	Niagara Falls	Mustard, T. ....	Toronto
Brown, H. G. ....	Toronto	Neylan, F. E. ....	Toronto
Brown, Miss H. H. B. ....	St. Mary's	Norsworthy, Miss H. A. ....	St. Thomas
Chappell, Miss C. S. ....	Japan	Page, F. H. ....	Toronto
Clark, Miss O. L. ....	Hamilton	Palmer, C. N. ....	Toronto
Clarke, S. H. ....	Toronto	Panton, Miss J. R. ....	Milton
Denomy, A. J. ....	Toronto	Parent, R. G. ....	Toronto
Dermoddy, V. A. ....	Hamilton	Patterson, Miss E. M. ....	Paris
Dixon, L. ....	India	Pyke, E. W. ....	Toronto
Doyle, Miss M. B. ....	Toronto	Riordan, J. J. ....	Bathurst, N.B.
Eakins, Miss C. M. ....	Toronto	Rotenberg, Miss H. ....	Toronto
Evans, G. E. ....	Toronto	Rotenberg, Miss R. ....	Toronto
Ford, J. A. ....	Toronto	Rutherford, Miss H. C. ....	Toronto
Fowler, L. H. ....	Calgary, Alta.	Scott, Miss O. J. ....	Toronto
Frank, C. J. ....	Toronto	Sharpe, B. W. ....	Toronto
Harris, Miss L. A. ....	Hamilton	Sherman, J. A. ....	Toronto
Henry, Miss M. P. M. ....	Orillia	Smith, J. L. ....	Toronto
Horwood, R. B. ....	Toronto	Smith, Mrs. M. ....	Toronto
Hunter, Miss L. M. ....	Bradford	Sanderson, A. L. ....	Wroxeter
Kaplan, Miss I. S. ....	Toronto	Taylor, W. S. ....	Toronto
Kendell, G. D. ....	Eldersley, Sask.	Thomas, H. F. S. ....	Toronto
Ketchum, J. D. ....	Toronto	Thompson, Miss C. M. ....	England

Name	Home Address	Name	Home Address
Thomson, V. A. ....	Toronto	Westington, M. M. ....	Bewdley
Toye, A. J. ....	Ravenna	Whelan, J. H. ....	Toronto
Tremaine, Miss A. M. ....	Toronto	Wickson, Miss M. E. ....	Toronto
Tustin, Miss E. A. ....	Acton West	Wilensky, Miss D. ....	Toronto
Walden, B. L. ....	Markdale	Wilson, Miss D. F. N. ....	Tilbury
Walker, R. P. ....	Toronto	Winkler, W. N. ....	Toronto
West, Miss P. M. ....	Toronto		

## CANDIDATES FOR M.D.

Dittrick, H. ....	Cleveland, Ohio	Graham, S. G. ....	Scotland
Drake, T. G. H. ....	Boston, Mass.	Urquhart, R. W. I. ....	Toronto
Gillespie, W. F. ....	Edmonton, Alta.	Wilson, M. J. ....	Toronto

## CANDIDATES FOR M.A.Sc.

Beck, J. B. ....	Merritton	Kimbell, H. P. ....	Moose Jaw, Sask.
Kellam, B. ....	Toronto	Manuel, F. R. ....	Toronto

## CANDIDATES FOR M.Arch.

Ryrie, J. ....	Toronto
----------------	---------

## CANDIDATES FOR C.E.

Byram, A. T. ....	Toronto	Culliton, P. J. ....	Pittsburg, Pa.
-------------------	---------	----------------------	----------------

## CANDIDATES FOR MET.E.

Thompson, W. K.,	New Brunswick, N.J.
------------------	---------------------

## CANDIDATES FOR D.Paed.

Anderson, G. R. ..	Moose Jaw, Sask.	Kerfoot, H. W. ....	Ottawa
Ashall, Miss F. M. ....	Toronto	Kirk, W. F. ....	Toronto
Bennett, W. G. ....	Toronto	Legge, A. E. E. ....	Toronto
Bowers, H. ....	Exeter	Long, J. A. ....	Toronto
Brokenshire, M. C. ....	Toronto	McGill, G. W. ....	Toronto
Bunt, W. H. ....	Toronto	McIntosh, H. W. ....	Toronto
Cavell, E. E. ....	Toronto	McKechnie, J. G. ....	Regina, Sask.
Cavell, H. E. ....	Toronto	McKone, E. H. ....	London
Clarke, T. E. ....	London	McQueen, J. ....	Toronto
Davidson, D. M. ....	Toronto	McWhorter, T. A. ....	Toronto
Davidson, J. H. ....	Hamilton	Martyn, H. G. ....	Stratford
Downey, R. F. ....	Peterborough	Misener, G. D. ....	Edmonton, Alta.
Ferguson, W. P. ....	Toronto	Morgan, Miss G. ....	North Bay
Gibson, J. W. ....	Victoria, B.C.	Murray, J. L. ....	Napanee
Halliday, Miss F. F. ....	Toronto	O'Reilly, J. B. ....	Toronto
Henry, S. E. ....	Timmins	Scott, A. R. ....	Arnprior
Hoffer, G. W. ....	London	Tamblyn, W. J. W. ....	Toronto
Holmes, A. ....	Toronto	Thomas, E. H. ....	Toronto
Holmes, S. D. ....	Sackville, N.B.	Trench, W. W. A. ....	Richmond Hill
Jamieson, E. ....	Toronto	White, L. ....	Toronto
Jennings, W. A. ....	Toronto	Willis, C. B. ....	Edmonton, Alta.
Kelly, W. F. ....	Toronto	Willoughby, E. F. ....	Winnipeg, Man.

## CANDIDATES FOR M.S.A.

Name	Home Address	Name	Home Address
Kemp, W. L. S. ....	Guelph	Smith, J. B. ....	Hespeler
Lemieux, O. A. ....	Guelph	Strong, W. J. ....	Vineland Station
Ruhnke, G. N. ....	Guelph		

## SUMMARY

Candidates for Ph.D. ....	88
Candidates for M.A. ....	139
Candidates for M.D. ....	6
Candidates for M.A.Sc. ....	4
Candidates for M.Arch. ....	1
Candidates for C.E. ....	2
Candidates for Met.E. ....	1
Candidates for D.Paed. ....	44
Candidates for M.S.A. ....	5
Graduate students ....	75
Total .....	365



## FACULTY OF DENTISTRY

## FIRST YEAR

Name	Home Address	Name	Home Address
Armstrong, J. J.	Melfort, Sask	Leitch, Miss L.	Toronto
Backus, L. W.	Smith's Falls	Levy, C. D.	Hamilton
Barrett, G. W.	Billings Bridge	Lindsay, H. R.	Arnprior
Black, D.	Winnipeg, Man	Lumsden, C. A.	Carman, Man
Blair, J. B.	Aneroid, Sask	Luzine, M. E.	Toronto
Bonnell, N. L.	Toronto	MacGregor, S. A.	Fakenham
Box, H. A.	Carleton Place	Macartney, E. S.	Ottawa
Brohman, L. J.	Guelph	Marshall, R. H.	Clinton
Burnett, C. W.	Smith's Falls	Markle, R. P.	Toronto
Campbell, D. A.	Windsor	Martin, J.	Cobalt
Clayton, R. L.	Fletcher	Martin, R. E.	Kingsville
Cobban, H. C.	Rosetown, Sask	Mason, C. T.	Simcoe
Conn, L. J.	Wolseley, Sask	Merritt, S. A. E.	Toronto
Davison, D. M.	Toronto	Mickle, G. A.	Amherstburg
Diprose, R. E.	Smith's Falls	Mills, A. C. C.	Newmarket
Dymond, D. B.	Toronto	Milne, J. B.	Toronto
Edmonds, J. R.	Seaforth	Perkins, A. F.	Barrie
Empson, R. H.	Cannifton	Raxien, S.	Toronto
*Foley, P. J.	Toronto	Reid, H. E.	Staples
*Harrington, A. L. B.	Toronto	Richardson, G. T.	Toronto
Herron, W. H.	Toronto	Rogers, R. F.	Watford
Hiscox, N. J.	Brampton	Rudell, C. A.	Kitchener
Holden, G. W.	Windsor	Shantz, S. C.	Baden
Holliss, N. P. W.	Brampton	Shea, L. A.	Toronto
Hopkins, S. J.	Vancouver, B.C	Sinclair, E. G.	Toronto
Hough, C. G.	Toronto	Stevenson, J. C.	Islington
Hyman, I. L.	Gravelbourg, Sask	Tanner, D. M.	Toronto
*Kamin, M. J.	Toronto	Trotter, T. C.	Toronto
Kickham, J. F.	Souris West, P.E.I	Twible, R. L.	Toronto
Ledger, W. H. C.	Oshawa	Walton-Ball, H.	Toronto
Leggett, G. D.	Toronto	Zack, H.	Hamilton

## SECOND YEAR

Ackland, S. C.	Delaware	Culbert, M. R.	Toronto
Armstrong, H. E.	Ottawa	Cummings, R. G.	London
Bernstein, A. H.	Winnipeg, Man	Dewar, W.	Toronto
Beube, F. E.	Hamilton	Dinniwel, W.	Warton
Blanshard, G. A.	Freeman	Doner, N. O.	Stayner
Brown, J. F.	Oakner, Man	Dore, J. N.	Hamilton
Carr, E. A.	Tupperville	Dunn, A. S.	Campbellford
Chambers, C. E.	North Bay	Dunn, H. J.	Hamilton
Chantler, M. A.	Barrie	Fleming, R. J.	Chaffey's Locks
Clarke, A. E.	Toronto	Fraser, W. G.	Parkhill
Cook, A. L.	Tillsonburg	Gerston, H.	Toronto
Coupland, J. P.	St. Mary's	Greenberg, I.	Winnipeg, Man
Crabbe, J. O.	Smith's Falls	Halldorson, O. G.	Wynyard, Sask
Craig, M. L.	Grand Valley	Hardman, E. L.	Chesley

\*Michaelmas Term.

Name	Home Address	Name	Home Address
Harris, F. E.	Toronto	Morgan, G. A.	Toronto
Hertell, L. A.	Toronto	Moser, J. E.	Toronto
Hilliard, D. G.	Kitchener	Murphy, E. M.	Blakeney
Horwitz H.	Toronto	Paterson, C. J.	Hamilton
Hudson, J. E.	Combermere	Robertson, C. S.	Antler, Sask
Ingimundson, A. B.	Winnipeg, Man	Shapera, E.	Winnipeg, Man
Johnston, C. L.	Creemore	Smart, W. E.	Cherry Valley
Jolofsky, H. M.	Toronto	Smith, L. H.	Simcoe
Joynt, W. G.	Ottawa	Stanley, H. O. E.	Ottawa
Knowles, R. G.	Toronto	Stewart, J. B. G.	Toronto
Levinson, K. I.	Kenora	Stewart, R. T.	Hamilton
Lockatch, L. S.	Toronto	Stinson, G. R.	Toronto
McKee, A. D.	Portage-la-Prairie, Man	Treadwell, C. I.	Long Beach
Mahaffy, W. G.	Parry Sound	Trotter, H. A.	Brandon, Man
Marling, A. M.	Cookstown	Wachnow, M.	Winnipeg, Man
Merrell, J. H.	Brandon, Man	Walden, D. H.	Cobourg
		Yoerger, H. L.	Humboldt, Sask

## THIRD YEAR

Allen, Hugh A.	Port Colborne	Konkle, H. R.	Welland
Aunger, W. R.	Stettler, Alta	Langstroth, R. S.	St. John, N.B
Barker, H. E.	Ottawa	Lee, R. E.	Victoria, B.C
Black, W. E.	Toronto	MacVicar, J. W.	Inwood
Box, E. M.	Carleton Place	Maitland, J. H.	Toronto
Bramah, E. J.	St. Catharines	Marshall, J. A.	Belleville
Brown, A. C.	London	Masiello, F. J.	Toronto
Brownlow, R. N.	Toronto	Milne, J. C.	Chesley
Buchanan, G. A.	Winnipeg, Man	Model, W.	Toronto
Butler, R. R.	Toronto	Morrow, A. B.	Ottawa
Chalmers, J. G.	Toronto	Moyle, J. H.	Paris
Claman, B.	Winnipeg, Man	Murphy, G. N.	Mount Forest
Cosentino, M. V.	Toronto	O'Brien, J. E.	Hamilton
Cummer, J. A.	Hamilton	Portigal, S. L.	Leader, Sask
Currie, R. L.	New Westminster, B.C	Priest, Miss M. S.	Toronto
Davis, L.	Winnipeg, Man	Quick, A. J.	Hamilton
Finlay, C. M.	St. Thomas	Reid, A. H.	Arnprior
Fraser, F. A.	Toronto	Roulston, F. M.	St. Thomas
Fyfe, A. A.	Toronto	Serena, F. M.	Hamilton
Galsky, H.	Winnipeg, Man	Skinner, C. L.	Saskatoon, Sask
Gruer, W. P.	Vankleek Hill	Somerville, A. A.	Orono
Hall, F. M.	Melville, Sask	Spence, Miss M. M.	Toronto
Hawtin, G. M.	Toronto	Stewart, S. C.	Watervliet, N.Y
Hind, G. C.	Exeter	Stodgell, F. J.	Walkerville, Ont
Honey, R. C.	Seagrave	Warren, J. M.	Calgary, Alta
Hudson, A. H.	Toronto	Washington, L. A.	Vancouver, B.C
Jackson, W. J. S.	Winnipeg, Man	Watson, G. A.	Stayner, Ont
Johnson, G. N. M.	Blackwater	Wetmore, S. K.	St. John, N.B
Johnston, G. W.	Port Arthur	Whitaker, G. W.	Kenora
Keenan, M. V. J.	Sault Ste. Marie	Whitman, O. B.	Regina, Sask
Kingman, G.	Toronto	Zackheim, M.	Toronto

## FOURTH YEAR

Anderson, P. G.	Port Elgin, N.B	Bishop, H. P.	Niagara Falls
Armstrong, T. E.	Port Credit	Brock, J. F.	Port Perry

Name	Home Address	Name	Home Address
Carmichael, L. D.	Toronto	Lipson, A.	Toronto
Corlett, H. M.	Chatham	McBrien, J. M.	Hartney, Man
Corman, H. A.	Winnipeg, Man	McCaffery, H. M.	Calgary, Alta
Davies, O. J.	Rodney	Macdonald, J. A.	Ripley
Deagle, M. A. J.	Winnipeg, Man	McDougall, D. A. R.	Ottawa
Dempster, J. C.	Toronto	Maynard, E. E.	Rochester, N. Y
Devins, W. P.	Aurora	Mills, F. S.	Toronto
Findlay, C. A.	Manotick Sta	Mitton, L. R.	Walkerville
Flora, F. A.	Winchester	Moffat, H. F.	Weston
Freir, D. R.	Niagara Falls	Moore, R. C.	Toronto
Galloway, H. F.	Toronto	O'Shaughnessy, J. V.	Hamilton
Graham, J. W.	Grimsby	Powell, H. B.	Calgary, Alta
Grant, J. A.	Tara	Richards, T. W.	Ottawa
Graves, J. H.	Montreal, Que	Robb, H. M.	Toronto
Greenberg, N. H.	Winnipeg, Man	Robeson, J. W.	Toronto
Greer, J. B.	Welland	Roland, J. M.	Freeman
Hare, G. C.	Toronto	Romph, W. E.	Hamilton
Haselton, L. D.	Saskatoon, Sask	Scott, T. N.	Toronto
Hay, D. C.	Peterborough	Sheridan, A. W.	Brockville
Hayhurst, T. E.	Hamilton	Slemon, L. R.	Ottawa
Herbert, J. V.	Toronto	Snodgrass, W. G.	Dauphin, Man
Hewitt, R. L.	Newmarket	Sparling, R. M.	St. Marys
Irwin, A. W.	Wingham	Stacey, S. E.	Peterborough
Keenan, H. A. T.	Sault Ste. Marie	Stewart, A. A.	Toronto
Lawson, W. L.	Exeter	Tilson, J. E.	Burk's Falls
Layter, G. C.	Toronto	Toll, C. E.	Blyth
Leith, A.	Sydney, N.S	Wolfe, W. A.	Sault Ste. Marie
Lindsay, J. C.	Acton		

## FIFTH YEAR

Adam, S. R.	Gull Lake, Sask	Kerr, O. S.	Cobourg
Bond, M. G.	Toronto	Keyfetz, B.	Toronto
Braden, L. R.	Calabogie	Kohli, F. A.	Hespele
Brookes, A. F.	Toronto	Landau, J.	Toronto
Bryce, W. D.	Kipling, Sask	Lloyd, V. M.	Granton
Carroll, J.	Hamilton	Loucks, H. R.	Napanee
Carroll, R. E.	Toronto	McCaffery, J. M.	Calgary, Alta
Cornell, G. W.	Toronto	McKay, K. H.	Bolton
Demuth, A. H.	Port Arthur	McLaughlin, T. E.	Ottawa
Dobbie, H. E.	Spencerville	McQueen, R. M.	Tillsonburg
Egan, J. C.	Toronto	McSloy, V. C.	Nixon
Fisher, E. M.	Huntsville	Manchester, Miss H. J.	Toronto
Flach, R. F.	Hamilton	Montgomery, A. R.	Winnipeg, Man
Garbutt, C. H.	Aurora	O'Neill, R. H.	Haileybury
Gardner, G. H.	Norwood	Phillips, K. M.	Toronto
Geddes, W. N.	Kincardine	Polack, J. G. G.	Toronto
Glascott, J. G.	Perth	Potter, W. A.	Southend
Griffith, T. C.	Weston	Quigley, M. J.	Toronto
Hellen, S. J.	Toronto	Rabinovitch, A.	Morden, Man
Hemmerich, R. G.	Preston	Ridge, W. H.	Hamilton
Hettenhausen, K. W.	Fort William	Rivkin, H.	Toronto
Holt, S. W.	Oyen, Alta	Rosen, S.	Hamilton
Hutchison, G. O.	Ottawa	Ross, W. J.	Gorrie
Johnson, B.	Baldur, Man	Schlosberg, J. I.	Toronto
Kennedy, D. M.	Orillia	Singer, A.	Saskatoon, Sask

Name	Home Address	Name	Home Address
Squire, G. C.....	Glencoe	Warfield, C. F.....	Toronto
Stitt, M. L.....	Fort William	Watson, T. A.....	Ailsa Craig
Sutherland, A. B.....	Toronto	Weatherill, J. F.....	Toronto
Tario, G. V.....	Pembroke	White, C. C.....	Peterborough
Trelford, J. E. A.....	Toronto	Williams, C. H. M.....	London

## GRADUATE STUDENT

Whang, T. C.....China

## DENTAL NURSES

Bindon, Miss R. G.....	Toronto	†Leggett, Miss M. E. ..	Toronto
Brown, Miss E. W.....	Hamilton	Leslie, Miss E. L. ....	Kingston
Craigmyle, Miss J. K.....	Toronto	Miller, Mrs. F. E. ....	Toronto
Cumming, Miss B. K.....	Parry Sound	Miller, Miss J.....	Portage-la-Prairie, Man
Gardhouse, Miss M. I.....	Weston	Nattress, Miss E. A.....	Detroit, Mich
Howden, Miss M. E.....	Caledonia	Shearer, Miss E.....	Ottawa
James, Miss K. L. S.....	Toronto	Tonkins, Miss F. I.....	Toronto
Leask, Miss H. E.....	Toronto		

†Easter Term.

## SUMMARY

First Year.....	60
Second Year.....	61
Third Year.....	62
Fourth Year.....	59
Fifth Year.....	60
Graduate Student ..	1
Dental Nurses.....	15
<b>Total.....</b>	<b>318</b>

## DEPARTMENT OF SOCIAL SERVICE

## FULL TIME STUDENTS

## FIRST YEAR

Name	Home Address	Name	Home Address
Brandon, Miss D. H.	Toronto	MacDougall, Miss R. P.	West Gore, N.S.
Faulds, Miss L. I.	Toronto	MacNeill, Miss F. E.	Toronto
Griffiths, Miss G. M.	Fonthill	Millsap, Miss F. E.	Toronto
Grigg, Miss D.	Waterloo	Papernick, Miss G. A.	Toronto
Grubb, Miss E.	Toronto	Rotenberg, Miss G.	Toronto
Hernance, Miss H. E.	Toronto	Sansone, M. A.	Toronto
Innes, Miss K. H.	Hamilton	Sutton, S. A.	Toronto
Irwin, Mrs. E. St. L.	Mount Forest	Taylor, Miss N. L.	Toronto
Jennison, Miss M. L.	Toronto	Touzel, Miss B. E.	Renfrew
MacCallum, Miss A. M.	Carleton Place		

## SECOND YEAR

Anderson, Mrs. H. G.	Toronto	Hollett, Miss G. B.	Toronto
Bach, Miss M.	Toronto	Jordan, Miss K. A.	Toronto
Baldry, Miss G. H.	Toronto	McDonagh, Miss P.	Toronto
Burns, Mrs. M. E.	Toronto	Patterson, Miss J. L.	Hamilton
Cale, Miss G. B.	Toronto	Roy, Miss E. M.	Bedford, N.S.
Casey, Miss J. M.	Toronto	Sabiston, Miss T. I.	Perth
Dease, Miss J. P.	Toronto	Samuel, Miss K.	Toronto
Fisher, Miss H. M.	Calgary, Alta	Shepherd, Miss E. P.	Alexandria
Foreman, Miss M.	Lansing, Mich.	Smith, Miss A. C.	Toronto
Goldstein, Miss E. B.	Toronto	Smookler, Miss J.	Toronto
Hill, Miss G. M.	Woodstock		

## PART TIME STUDENTS

Balderston, Miss O. M.	Toronto	Goldberg, Miss S. D.	Toronto
Bennett, Miss M. L.	Toronto	Gordon, Miss M. L.	Stratford
Bobbette, Miss C. T.	Toronto	Grierson, Mrs. M.	Londesboro
Brell, Miss A. M.	Pambrun, Sask	Gulliver, Miss E. D.	Whitby
Brown, Miss L. K.	Victoria, B.C.	Gunn, Miss M. D.	Toronto
Burpee, Miss R. M.	Ottawa	Hamilton, Miss I. V.	Toronto
Burwash, Mrs. M. T.	Toronto	Hogge, Miss R. M.	Toronto
Butler, J. H.	Hamilton	Home, K. P.	Toronto
Card, Miss D. E.	Wallard, Sask	Hope, Miss H. J.	Toronto
Clark, Miss M. F.	Asbestos, Que	Hutchinson, J. L.	Toronto
Crawford, Miss S. M.	Ashton	Ibbotson, Miss H. M.	Toronto
Crouch, W. H.	East Aurora, N.Y.	Jackson, Miss A.	Toronto
Crouse, Miss V. G.	Toronto	Jones, Miss M. P.	Toronto
Davies, J. R.	Windsor, N.S.	Jost, Miss E. E.	Yarmouth, N.S.
Edwards, Miss M. A.	Toronto	Lang, Miss K.	Halifax, N.S.
Elliot, Miss L. A.	Toronto	Lucas, Miss A. R.	Edmonton, Alta
Elliott, Mrs. C.	Toronto	MacLean, Miss J. C.	Almonte
Elliott, Miss V. J.	Baxter	McMaster, Miss M. S.	Toronto
Elton, Miss M.	Long Branch	Macrae, Miss F. K.	Toronto
Furlong, J.	Toronto	Macrae, Miss M. J.	Toronto

Name	Home Address	Name	Home Address
Moody, Miss B. S.....	Vancouver, B.C	Puckering, Miss V. M.....	England
Morgan, Miss C. E. M.....	Brockville	Ramsay, Miss M. M.....	Brantford
Morrison, W. K. ....	Richwood	Ramsbottom, Miss M.....	Toronto
Moscoe, Miss R.....	Toronto	Silverman, Miss S.....	Toronto
Murray, Miss A. M.....	Milan, Que	Simkin, Miss A. E.....	Toronto
Murray, Miss J. D. ....	Toronto	Sparling, J. G.....	Toronto
Nattress, Miss J. M	Sault Ste. Marie	Tawse, Miss M. D.....	Guelph
Ord, Miss G. M.....	Islington	Thomas, W. L.....	Newcastle
Palmer, C. N.....	Toronto	Wilcox, Miss C. ....	Toronto
Phillips, Miss M.....	Toronto		

## SUMMARY

Full Time Students:	
First Year.....	19
Second Year.....	21
Part Time Students.....	59
	<hr/>
	99

## DEPARTMENT OF PUBLIC HEALTH NURSING

## FULL TIME STUDENTS

Name	Home Address	Name	Home Address
Benson, Miss C. A.	.....Midland	Maloney, Miss G. C.	.....Toronto
Clancey, Miss E. M.	.....Guelph	Meagher, Miss M. I.	.....Toronto
Conley, Miss G.	.....Stirling	Mickleborough, Miss D. H.	.....Toronto
Craig, Miss I. M.	.....Toronto	Morrison, Miss E. E.	.....Petrolia
Elliott, Miss M. V.	.....Agincoourt	Nealon, Miss M.	.....Toronto
Fensom, Miss M. V.	.....Toronto	Peters, Miss L. M.	.....Dalhousie Lake
Goss, Miss M. C.	.....Coldwater	Robinson, Miss M. G. A.	.....Richmond Hill
Grover, Miss H. L.	.....Toronto	Scott, Miss M. R.	.....Toronto
Hawkes, Miss T. M.	.....Toronto	Shantz, Miss A.	.....Kitchener
Heald, Miss A. G.	.....England	Smart, Miss E. S.	.....Smithville
Ingall, Miss M. M.	.....Toronto	Sutherland, Miss S. S.	.....Toronto
Lefter, Miss O. A.	.....Niagara Falls	Vernon, Miss A. M.	.....Toronto
McCutcheon, Miss M. A.	.....Kleinburg	Watt, Miss K. E.	.....Toronto
MacLaren, Miss H. H.	.....Toronto	Whitelaw, Miss J. D. G.	.....Toronto
MacLaurin, Miss E. M.	.....Belleville		
MacLean, Miss R.	.....Charlottetown, P.E.I.		

## OCCASIONAL STUDENTS

Aldous, Miss H.	.....Toronto	Brown, Miss F. E.	.....Toronto
Allen, Miss C.	.....Toronto	Brown, Miss M.	.....Toronto
Anderson, Miss G. W.	.....Powassan	Bungay, Miss N.	.....Toronto
Anderson, Miss J. I.	.....Toronto	Burrell, Miss M. E.	.....Port Credit
Anderson, Miss M.	.....Toronto	Burton, Miss D. M.	.....Toronto
Arksay, Miss B. E.	.....Toronto	Butcher, Miss K.	.....Port Sydney
Arnold, Miss M. E.	.....Dundalk	Byers, Miss I.	.....Cobden
Barkley, Miss M. V.	.....Chesterville	Calverly, Miss B.	.....Oakville
Bartsch, Miss C. L.	.....St. John, New Brunswick	Cameron, Miss R.	.....Barrie
Batten, Miss G.	.....Clarke's Beach, Nfld.	Campbell, Miss V.	.....Tottenham
Beach, Miss E. G.	.....Ottawa	Cantelon, Miss K.	.....Toronto
Beall, Miss C. V.	.....Toronto	Cardwell, Miss M.	.....Toronto
Beamish, Miss R. M.	.....Toronto	Carr, Miss A. C.	.....Iona Station
Beare, Miss A.	.....Port Perry	Cartwright, Miss E. M.	.....Toronto
Beer, Miss V.	.....Strathroy	Charlebois, Miss A.	.....Toronto
Benson, Miss O.	.....Midland	Clark, Miss I.	.....Kirkfield
Bews, Miss D.	.....Waterdown	Clark, Miss N.	.....Toronto
Beyer, Miss B. M.	.....Toronto	Clark, Miss P. B.	.....Toronto
Bird, Miss M. M.	.....Bracebridge	Cleland, Miss E. M.	.....Cobden
Blanchard, Miss M. E.	.....Sturgeon Falls	Crisold, Miss J.	.....Toronto
Blood, Miss M.	.....Toronto	Code, Miss M. E.	.....Smith's Falls
Bolger, Miss R.	.....Toronto	Collinson, Miss C.	.....Toronto
Bowie, Miss L.	.....Toronto	Conlin, Miss L. M.	.....Toronto
Breithaupt, Miss M. M.	.....Kitchener	Cooke, Miss R. F.	.....Toronto
Brenton, Miss H.	.....London	Cottrill, Miss M.	.....Port Elgin
Brocklebank, Miss S.	.....Walkerton	Craig, Miss M. A. L.	.....Toronto
		Crawford, Miss M.	.....Toronto
		Crockart, Miss J.	.....Aurora

Name	Home Address	Name	Home Address
Cryderman, Miss E.	Niagara Falls	Higinbotham, Miss M. M.	Lethbridge, Alta.
Cudmore, Miss E.	Seaforth	Hill, Miss G. W.	King's County, N.B.
Cuffe, Miss K. M.	Toronto	Hoeffin, Miss C.	Toronto
Curtis, Miss F. L.	Richmond Hill	Holtby, Miss M.	Burlington
Cuthbert, Miss C. J.	Woodstock	Howse, Miss K.	Bay Roberts, Nfld.
Daig, Miss N.	Mildmay	Hudson, Miss C.	Weyburn, Sask.
Daley, Miss M.	Barrie	Hughes, Miss C. E.	Welland
Davis, Miss N.	Toronto	Hunter, Miss A. B.	Toronto
deLeon, Miss I. L.	Jamaica, B.W.I.	Hunter, Miss J. F.	Toronto
Derry, Miss M.	Kingston	Innes, Miss J. I.	Campbellford
Deverell, Miss M. M.	Toronto	Innes, Miss P.	Norwood
Dove, Miss D. L.	Toronto	Jarvis, Miss E. I.	Madoc
Draper, Miss E.	Renfrew	Jenkins, Miss M.	Toronto
Duckworth, Miss H.	Toronto	Jennings, Miss G. F.	Toronto
Elliot, Miss M. L.	Milton	Johnstone, Miss M.	Wingham
Emerson, Miss G. E.	Detroit, Michigan	Jones, Miss C.	Petitcodiac, N.B.
Fairbrother, Miss K.	Beamsville	Jones, Miss G.	Toronto
Fee, Miss O.	Lindsay	Kennaley, Miss G. M.	Mimico
Fidler, Miss M.	Toronto	Kent, Miss D. L.	Toronto
Firth, Miss B. J.	Brampton	Kidd, Miss J. M.	Toronto
Fisher, Miss F. L.	Toronto	Kidd, Miss W. M.	Everett
Fitzsimmons, Miss E.	Ottawa	Kirby, Miss L. J.	Toronto
Flatt, Miss M.	Toronto	Knight, Miss A. M.	England
Flaxman, Miss A. L.	Huntsville	Knight, Miss M. J.	Prince George, B.C.
Fortner, Miss E. C.	Streetsville	Lalonde, Miss M.	Toronto
Fraser, Miss E. E.	Toronto	LaRocque, Miss M.	Lanark
Fraser, Miss K. E.	Ottawa	Lash-Miller, Miss A.	Toronto
Frost, Miss H. M.	Toronto	Lavelle, Miss A. I.	Toronto
Fryer, Miss M.	Winnipeg, Man.	Lindsay, Miss L.	Georgetown
Garbutt, Miss M. J.	Guelph	Lord, Miss E. M.	Toronto
Gibson, Miss C. L.	Chapleau	Lougheed, Miss J.	Forest
Gignac, Miss F. H.	Penetanguishene	Lowe, Miss B.	Killarney
Gillespie, Miss W.	Cornwall	Lyall, Miss E.	Shanty Bay
Gollan, Miss J.	Roscmount	Madden, Miss M.	Penetanguishene
Gordon, Miss J. C.	Toronto	Malloy, Miss M. G.	Nobleton
Goudet, Miss A. B.	Toronto	Markle, Miss M. E.	Toronto
Gould, Miss G. M.	Toronto	Marshall, Miss I.	Eversley
Grafton, Miss V.	Singhampton	Martin, Miss A.	Milton
Graham, Miss A.	Moose Jaw, Sask.	Martin, Miss B.	Toronto
Gunn, Miss A.	Toronto	Mathieson, Miss K.	Toronto
Hall, Miss M. H.	Toronto	Matthews, Miss F. M.	Toronto
Hall, Miss V.	Vasey	Mattimore, Miss S.	Toronto
Hancock, Miss M.	Port Hope	Middleton, Miss A.	Toronto
Hansen, Miss H.	Toronto	Mills, Miss B. H.	Newmarket
Harkness, Miss M. E.	Lion's Head	Milne, Miss D. H.	Toronto
Harper, Miss K.	London	Moore, Miss K.	Barrie
Hartill, Miss C.	Burk's Falls	Mosley, Miss P.	Parry Sound
Harton, Miss L.	Peterborough	McAuley, Miss E.	Trenton
Henderson, Miss J. C.	New Liskeard	MacDonald, Miss I. J.	Peterborough
Henderson, Miss M.	Toronto	McFarlane, Miss A.	Clinton
Henry, Miss J. I.	Orangeville		
Herman, Miss E. E.	Craighurst		



Name	Home Address
McGeachy, Miss J. A.	Sarnia
McGee, Miss H.	Toronto
McKee, Miss E. V.	Toronto
McKelvey, Miss I. B.	Bright
McKenzie, Miss M.	Toronto
McKinlay, Miss G.	Franklin
McKinnon, Miss C. L.	Toronto
McMillan, Miss A.	Ottawa
McMillan, Miss A. C.	Perth
McNeill, Miss K. F.	Mimico Beach
McNerney, Miss B. M.	Toronto
Nash, Miss G. A.	Gorrie
Nettleton, Miss M.	Penetanguishene
Newcombe, Miss I.	Toronto
Newton, Miss A.	Owen Sound
O'Connor, Miss S.	Toronto
Patton, Miss E. M.	Toronto
Pearson, Miss M.	Waterdown
Penelton, Miss M.	Alliston
Perry, Miss A.	Toronto
Perry, Miss G. L.	Brampton
Perry, Miss M. A.	Napanee
Peterson, Miss F.	Toronto
Phillips, Miss N. M.	Madoc
Playle, Miss M. E.	Toronto
Porter, Miss E. A.	Powassan
Quigley, Miss M. R.	Toronto
Quinn, Miss H. E.	Campbellton, N.B.
Raney, Miss L. E.	Moosomin, Sask.
Reesor, Miss K. R.	Markham
Reid, Miss A. A.	Millbank
Richardson, Miss P. V.	Queensville
Riffle, Miss E.	Toronto
Risebrough, Miss L.	Newtonbrook
Rogers, Miss L.	Toronto
Rolland, Miss M. A.	Orillia
Rooney, Miss D.	Toronto
Russ, Miss E.	Nashville, Tenn.
Rutledge, Miss F.	Streetsville
Saddington, Miss F.	Arnprior

Name	Home Address
Savag�, Miss L. B.	Waterford
Scanlon, Miss L.	Toronto
Scott, Miss F. I.	Seldom, Nfld.
Scott, Miss K. H.	Toronto
Scott, Miss M. H. M.	Toronto
Service, Miss M. J.	Toronto
Sharpe, Miss G.	Toronto
Smith, Miss E. M.	Kenora
Smith, Miss M.	Toronto
Smith, Miss V. M.	Smiths Falls
Speck, Miss V.	Lakeside
Stellar, Miss M.	Hungary
Stevenson, Miss V.	Coniston
Stirling, Miss B. L.	Toronto
Stonehouse, Miss B.	Durham
Streh, Miss D. M.	Saskatoon, Sask.
Suddaby, Miss H. J.	Brantford
Tanton, Miss M.	Toronto
Thompson, Miss M.	Markdale
Thurlau, Miss H. C.	Schrieber
Tillett, Miss J. M.	Roches Point
Tucker, Miss H.	Detroit, Mich.
Vrooman, Miss I.	Niagara-on-the-Lake
Walker, Miss B. H.	London
Walton, Miss M. E.	Port Loring
Ware, Miss A.	Port Hope
Watson, Miss E. E.	Toronto
Watt, Miss A.	Englehart
Weirs, Miss I.	Hamilton
Wettelings, Miss A.	Welland
Whately, Miss A.	Thornbury
Whitelaw, Miss J. G.	Toronto
Wilson, Miss H. S.	Hanover
Wilson, Miss I.	Barrie
Wilson, Miss M.	Toronto
Wood, Miss J. I.	Toronto
Wood, Miss M. A.	Cobourg
Young, Miss E. B.	Toronto
Young, Miss V.	Toronto

## SUMMARY

Full time students	30
Occasional students	235
Total	265

## GRAND SUMMARY

Faculty of Arts	2,780
Faculty of Medicine	759
Faculty of Applied Science and Engineering	487
Faculty of Household Science	98
Ontario College of Education	408
Faculty of Forestry	49
Faculty of Music	46
School of Graduate Studies	365
Faculty of Dentistry	318
Department of Social Service	99
Department of Public Health Nursing	265
University Extension (Occupational Therapy)	25
Duplicate registrations	70
	<hr/> 5,029

## HISTORICAL SKETCH

The movement which ended in the establishment of the University of Toronto as the centre of the educational system of the Province of Ontario originated with General Simcoe, the first Governor of Upper Canada, who repeatedly expressed his conviction, both before his departure from England and also during his term of office (1792-1796), that the best interests alike of the Government and of the inhabitants demanded the establishment of a University in Upper Canada. It was not, however, during his administration that the project assumed a definite form.

In 1797 the Legislative Council and House of Assembly in a joint address to King George III. asked "that his Majesty would be graciously pleased to direct his Government in the Province to appropriate a certain portion of the waste lands of the Crown as a fund for the establishment and support of a respectable Grammar School for each district thereof; and also a College or University for the instruction of youth in the different branches of liberal knowledge". To this address a favourable answer was transmitted, and the acting Lieutenant-Governor, the Hon. Peter Russell, was directed to determine the manner and character of the appropriation. In accordance with this request the Executive Council of Upper Canada reported on the 1st December, 1798, that an appropriation of 500,000 acres would be sufficient for the support and maintenance of four Grammar Schools and a University. For the foundation of the latter nothing was done until 1827, when a Royal Charter was granted for the establishment at or near York, as Toronto was then called, of a College, "with the style and privileges of a University", to be called "King's College", having for its endowment that portion of the grant of "waste lands" originally provided for the University in the report above referred to. These lands were in 1828 exchanged for 225,944 acres of Crown Reserves.

Owing not only to the character of the endowment, which required time for its realization in the form yielding an annual revenue, but also owing to the terms of the charter, which required all the members of the Faculty to be adherents of one particular religious denomination, the opening of the College was delayed for fourteen years. In consequence of public representations on the sectarian character of the College, all religious tests were abolished by an amended charter which passed the two Houses of the Provincial Legislature and received the Royal Assent in 1837. In 1842 the affairs of the University had assumed such a condition as to render its organization possible, and Faculties of Arts, Medicine, Law and Divinity were established. In that year the erection of the College Building was begun on the eastern portion of the site of the present Legislative Buildings. In 1843 the first matriculation of students took place, and inaugural addresses and lectures were delivered on the 8th and 9th of June of that year.

The agitation which resulted in the amended charter of 1837 had continued after the opening of the College in 1842, owing to the efforts made to defeat the purpose of the amendment, and in 1849 an Act of the Legislature effected important modifications in the constitution of King's College whereby all instruction in Divinity was discontinued, and a larger measure of public control of the affairs of the University instituted, through the formation of a Senate, of which a number of the members were appointed by the Crown. The name was now changed from that of "The University of King's College" to that of "The University of Toronto".

Three years afterwards the University underwent a further transformation, by which the Act of 1853 abolished the Faculties of Medicine and Law, and divided its functions between the two newly organized corporations of the "University of Toronto" and "University College." To the Senate were assigned the duties of framing the curriculum, holding examinations and admitting to degrees in Arts, Law and Medicine, while to the Presidents and Professors of University College, as a distinct and independent corporation with special powers, were assigned the teaching in Arts and the entire discipline and control of students. The models followed in the reorganization of the University, it claimed, were the University of London and University College, London, both of which had then been only recently established. For thirty-four years the University of Toronto and University College performed the functions respectively assigned to them by this Act.

During the early years of the University it experienced repeated changes in its local habitation. The faculty and students of King's College were at first temporarily accommodated in the Parliament Buildings until the erection of the east wing of King's College admitted of the occupation of their own building. From this they were anew transferred to the old Parliament Buildings in 1853, when, by a special Act, the site of King's College was appropriated for the proposed new buildings for the use of the Parliament of Upper and Lower Canada. On the return of the Legislature to Toronto, in 1856, the Faculty resumed the occupation of the old King's College Building, while one formerly in use by the Medical Faculty, situated on the site of the present Biological Building, was being adapted for their occupation. There accordingly the work of the College was carried on, pending the erection of the new University buildings. These buildings were begun in 1856, and on October 4th, 1859, the top stone of the main tower was placed in position by Sir Edmund Head, the Governor-General, an old Oxford professor, the value of whose sympathy and support at this critical period in the history of the University cannot be overestimated.

For thirty-four years the constitution of the University of Toronto and of University College remained unchanged. Other collegiate bodies, principally denominational schools of theology, entered into affiliation with the University, and, with regard to their especial requirements, the course of study in Oriental Languages was augmented, but the Faculty of University College continued to do the work of instruction for nearly all the students

in Arts who presented themselves for examination. The candidates for examination and degrees in medicine were trained in medical schools in affiliation with the University, and for degrees in Law the examinations were based upon text-books prescribed by the Senate, without teaching.

In 1887 both the University of Toronto and University College were remodelled by the University Act. The main object of this legislation was to create a practicable basis for the union of the various denominational universities in Ontario with the provincial university in order to secure a more uniform standard of higher education. Upon the proclamation of the Act, Victoria University at Cobourg entered into federation with the University of Toronto and on its removal from Cobourg to Toronto, where college buildings were erected to the north of Queen's Park, the union of the two universities was completed in 1892. In 1903 the University of Trinity College entered into federation also, but it was not until 1925 that the college moved from Queen Street West to Queen's Park and occupied the new building north of Hoskin Avenue. St. Michael's College, which had been given the status of a federated college by the Act of 1887, was created a college in the Faculty of Arts in 1910.

The faculty of University College consists of professors and lecturers in Classical Languages and Literature (including Ancient History), Oriental Languages (including Ancient Oriental History), English, French, German and Moral Philosophy. All other portions of the Arts course are assigned to the faculty of the University of Toronto, of which the lectures are made equally available to the students of University College and those of all federated universities and colleges.

For the maintenance of the science departments on a scale demanded by modern methods of research special provision has been made by the erection of new buildings and the enlargement of old buildings. Separate buildings have been provided to house each of the following departments: Biology, Botany, Chemistry, Physics and Household Science. These are departments in the Faculty of Arts, but give instruction to students of all faculties of the University.

The Faculty of Medicine of the University of Toronto was established in 1843, when the University was first organized, but was abolished in 1853. It was re-established by the Act of 1887. All the facilities of the Faculty of Arts are available for students in Medicine and the laboratories and the scientific departments are utilized equally by the students of both faculties. The following special buildings, however, have been erected to accommodate the purely medical departments: the Medical, the Anatomy, the Pathology and the Hygiene buildings.

The Faculty of Applied Science and Engineering was established by the University Act of 1906, having existed previously as the School of Practical Science founded in 1877. The following special buildings have been erected to accommodate the engineering departments: the Engineering, the Mining, the Thermodynamics and the Electrical buildings.

Since the passing of the University Act the following faculties have

been established: Household Science and Education, 1906, accommodated in its own building specially erected for that purpose; Forestry, 1907, provided with a new building in 1925; Music, 1918; School of Graduate Studies, 1922; the Faculty of Dentistry, formerly the School of Dentistry of the Royal College of Dental Surgeons of Ontario, 1925. The Faculty of Dentistry has its own building, which was transferred to the University by the Royal College of Dental Surgeons on the creation of the faculty.

In addition to these faculties two teaching departments have been created, Social Service and Public Health Nursing, which offer respectively two and one year diploma courses. Degrees in Pharmacy, Agriculture and Veterinary Science are conferred upon those students of the following affiliated colleges respectively who fulfil the requirements of the College and of the University: the Ontario College of Pharmacy, the Ontario Agricultural College and the Ontario Veterinary College.

On November 11th, 1919, Hart House, the gift of the Massey Foundation, was formally opened by His Excellency the Duke of Devonshire, Governor-General of Canada. The building is the Undergraduates Union of the University and contains completely equipped club rooms, including common rooms, dining hall, chapel, the offices of the various students societies, gymnasias and theatre

The new building of the School of Hygiene, the gift of the Rockefeller Foundation, was officially opened on June 9th, 1927.

## THE ROYAL ONTARIO MUSEUM

The Royal Ontario Museum was officially opened by Field Marshal His Royal Highness the Duke of Connaught, Governor-General of Canada, on the afternoon of Thursday, March 19th, 1914. This event marked a memorable occasion in the history of Art and Science in the Province of Ontario.

The Royal Ontario Museum was established under an Act of the Legislative Assembly of Ontario in the year 1912. According to the Act the purposes of the museum are:—

(a) The collection and exhibition of objects of every kind calculated to illustrate the natural history of Ontario, and thereby to aid in a knowledge of what this province is able to contribute to science and industry.

(b) The collection and exhibition of objects of any kind calculated to illustrate the natural history of the world and the history of man in all ages.

(c) Such other objects as may be authorised by the Lieutenant-Governor in Council.

The cost of the erection of the building and the maintenance thereof is borne in equal amounts by the Province of Ontario and the University of Toronto. The present building, inclusive of offices, is 360 feet long and 60 feet wide and was erected at a cost of about \$400,000. The large section of University property lying between the present building and Avenue Road has been reserved by the Board for the extension of the Museum. The proposed plans show the building in the form of a hollow square with a handsome stone front facing Avenue Road (continuation).

Under Section 20 of the Museum Act the Board is empowered to establish various departments of the Museum which are to be designated "The Royal Ontario Museum of.....". In accordance with this by-law the Board has already established the Royal Ontario Museums of Archaeology, Geology, Mineralogy, Palaeontology and Zoology.

The establishment of this museum conjointly by the Province of Ontario and the University of Toronto is due in very large measure to the enthusiasm and leadership of the late Sir Edmund Walker, the Chairman of the Board of Trustees.

The Museum is governed by a Board of Trustees, a body corporate consisting of ten members. The Minister of Lands, Forests and Mines and the Minister of Education of the Province of Ontario, and the Chairman of the Board of Governors of the University of Toronto are ex-officio members of this Board. The other seven members are appointed—four by the Lieutenant-Governor in Council, and three by the Governors of the University of Toronto as follows,—

*Appointed by the Lieutenant-Governor in Council :*

J. B. O'BRIAN, ESQ., K.C.,  
MRS. H. D. WARREN,  
SIGMUND SAMUEL, ESQ.

*Appointed by the Governors of the University of Toronto :*

Sir Joseph Flavelle,  
The President of the University,  
Colonel R. W. Leonard.

## ARCHAEOLOGY.

The Royal Ontario Museum of Archaeology is under the direction of C. T. Currelly, and is designed to show the best work which was done in the different crafts by the people of the past. An attempt has been made to show the history of the development of each of the great arts which have made civilization possible, by exhibiting the best examples of the early stages of development, of the culminating point, and then of the decline.

For the Stone Age the collection is very large, almost world-wide. The use of the early metals (copper and bronze) in the evolution of important tools is shown by a series of examples grouped under the Prehistoric Collection.

A large Egyptian series and a smaller Babylonian collection exhibit the history of pottery, stone vases, weapons, jewelry, medicinal articles, tools, textiles, sculpture and objects connected with death and burial. These exhibits occupy three galleries.

Two large galleries are devoted to the exhibition of ancient works of art from Greece and Italy. These consist of vases that illustrate nearly all the stages of vase painting from the Aegean and the mainland, armour, statuettes, jewels, and sculpture.

The next gallery is devoted to a collection to illustrate the life of the common people at the time of Christ and the early Church. This ranges from rag dolls to weapons, and from combs and domestic articles to shoes and tunics. In this same gallery is a large collection mainly of pottery objects obtained from the tombs of Palestine, and extending in periods from the earliest times down to the periods of the Byzantine empire.

As the student is now brought through the great spread of civilization of the Roman period, the next exhibition is of those nations that have lagged behind, where prehistoric things may be illustrated more freely by peoples who have recently been in the Stone Age. Here are shown the weapons and implements of the Eskimos, Africans, and South Sea Islanders, and of other peoples in the Stone Age or other primitive conditions.

Parallel to this gallery runs the collection illustrating the life of the American Indian. This consists of a fine series of paintings, objects of



the Stone Age, and survivals of early things in use by the present Indians. It is mainly devoted to North America, though several cases contain Mexican, Peruvian and other South American objects.

The great central hall is packed with Chinese works of art, of which we are particularly rich in tomb objects, especially terracotta sculptures and early wares. The collection of stone sculpture is also considerable, and the collection of textiles, jades, bronzes, etc., quite large. The whole forms one of the best general collections of Chinese art in existence. No space is available for the large collection of very fine Chinese paintings possessed by the Museum.

South of the central hall are two galleries devoted mainly to furniture and rooms, but with a certain number of costumes, wood-carvings, etc., put in because of lack of other space for them.

The cross gallery at the end contains the Japanese collections of pottery, bronzes, armour, carvings, paintings, etc.

Between the large central hall and the door are parallel galleries, one devoted to the history of faience, and filled in with musical instruments, velvets, glass, furniture, sculpture, etc.; the other one devoted to lace and embroideries, but with the general collection of arms and armour also packed into it.

The space immediately inside the door is devoted to the exhibition of recent acquisitions.

#### MINERALOGY

The Royal Ontario Museum of Mineralogy, which is under the direction of Professor T. L. Walker, contains extensive collections of minerals and rocks. The systematic collection of minerals is unusually complete and serves not only as a means of familiarizing students with the appearance and association of most of the known minerals but also as a store of comparative material for research connected with Canadian mineral deposits. To make the collections more useful to visitors the large specimens in the high cases are provided with special explanatory labels. In the cases on the east wall of the gallery a special display of the minerals of Canada is arranged.

The most generous benefactors of this section are men connected with the mining industry. During the past year the collections have been increased by donations from a large number of friends, exchange, purchase and collection by the Museum Staff.

Notable presentations have been made by the Mining Corporation of Canada, J. G. Dickenson, Esq., Dr. J. M. Bell, F. A. C. Shaw, Esq., P. R. Drummond, Esq., and the Imperial Institute. A large and interesting collection principally from the O'Brien mine in Cobalt was presented by permission of the Honourable Senator M. J. O'Brien by J. Victor Culbert, Esq., in the names of his brother the late M. T. Culbert and himself.

Important exchanges have been made with the United States National

Museum, the British Museum of Natural History, the Museum National d'Histoire Naturelle (Paris), the Geological Survey of Korea, Professor Alberto Pelloux, Professor F. Slavik, Lt.-Colonel L. Vesignie (Fontainebleau) and M. Vonsen, Esq., in addition to numerous exchanges of lesser magnitude.

## GEOLOGY

The Museum of Geology is under the direction of Professor E. S. Moore, and it occupies the gallery on the lower floor. Its alcoves are designed to exhibit specially the mineral resources of Canada and also the general features of Economic, Structural, and Dynamic Geology. The gallery is devoted largely to the exhibition of ores, and other economic mineral substances which have for the most part been received through the generosity of the men in the mining industry.

The more important collections in the gallery include, the Cobalt silver ores, the ores and associated rocks of the Sudbury Nickel field and the Porcupine district, the coals, oils, clays, building stones, micas, and ores of Canada, the asbestos of Quebec, and the minerals of economic importance from various other parts of the world. There are models of two of the Porcupine mines, of Niagara Falls, and of other geological features. There is an unusually fine exhibit of marbles, domestic and foreign, and the exhibit of specimens illustrating glacial phenomena in various geological periods, and on several continents, is usually regarded as the most complete in existence.

Of the additions to the Museum during the past year the following are the more important:

Presented to the Museum—

Gold ores from McIntyre-Porcupine Mines, Ltd., Schumacher, Ontario, per Mr. K. Gray.

Gold ore from Hungary, and zinc ore from Sweden, by Professor H. Ries, Cornell University.

Gold ore from Barry-Hollinger Mine, Ontario, by Mr. Robert Fennell.

Gold ore from the Goudreau district, Ontario, by Dr. T. L. Gledhill.

Iron ore from Morocco, by Dr. A. P. Coleman.

Iron ores from Clinton, N.Y., by Professor N. C. Dale.

Hematite from Wallbridge Mine, Hastings County, by Mr. Campbell Wallbridge.

Collection of various ores from various countries, by the Imperial Institute, London, England.

Suite of platinum ores from South Africa, by Dr. A. H. Hall, Assistant Director of the Geological Survey, Union of South Africa, Pretoria, S.A.

Collection of rock phosphates from Idaho, Utah, and British Columbia, by Mr. L. Telfer.

Collection of British Columbia rock phosphates, by the Consolidated Mining and Smelting Company of Canada, per Mr. L. Telfer.

Potash salts from Alsace, France, by Professor J. Jung, Strasburg.

Amber from Cedar Lake, Manitoba, by Mr. A. C. Craig.

Queenston dolomite from Queenston, Ontario, by Canada Crushed Stone Corporation, Ltd., Hamilton.

Weathered limestone from Fenelon Falls, Ontario, by Mr. Austin Neame.

By exchange—

Suite of asbestos-anthophyllite specimens from Georgia, by Professor H. Ries, Cornell University.

Collections—

Copper, iron, and mercury ores from Spain, by the Director.

Lead ores from Galetta, Ontario, by Mr. W. F. Baker.

Arsenic-gold ores from Hedley, B.C., and copper ores from Copper Mountain B.C., by Mr. P. G. Paterson.

Purchased—

Gold ores from South Africa, Madagascar, Transylvania, Mexico, California, Colorado, Oregon, and Canada.

Apatite and anhydrite from Ontario.

Suite of copper and gold ores from Ruth, Nevada.

Relief maps of the southern Appalachian Mountains, and the Montegian Hills, Quebec.

#### PALAEONTOLOGY.

The Museum of Palaeontology is under the direction of Professor W. A. Parks, and occupies the middle section of the top floor of the building. The collection of fossils is very extensive and contains many rare and unique specimens. It has developed from a nucleus presented by Sir Edmund Walker some years ago. Among the more important exhibits are the type Cambrian fossils presented by Sir William MacKenzie; the fossil sea-lilies presented by Mr. Frank Springer of Burlington, Iowa; a large fossil reptile presented by Sir Edmund Walker, Sir Donald Mann, Sir Lyman Melvin Jones and others; a moa from New Zealand; a mastodon from Ontario; and a remarkable series of the great dinosaurs from Alberta.

A series of wall cases has been installed, in which the geology and palaeontology of Canada is illustrated in a continuous but restricted manner.

The collection of dinosaurs has been greatly extended since the appearance of the last report. There are now on exhibition four complete skeletons and several heads of different species of trachodont dinosaurs; three heads of horned dinosaurs, three partial skeletons with skin and external plates of armoured forms; two partial skeletons of bird-like dinosaurs, one with the only complete head ever found; a skeleton with head of *Thescelosaurus*; a new species of *Champsosaurus*; and a partial skeleton of the great carnivorous dinosaur *Albertosaurus*.

The department is provided with commodious storage and preparation rooms equipped with the necessary appliances for cutting and polishing specimens, and for the complex work of preparing vertebrate skeletons.

The more important additions during the year are as follows:

Large collection of Devonian conodonts—R. R. Hibbard, Buffalo, N.Y.

Collection of Triassic ammonites—Percy Train, Nevada.

Ordovician fossils from Ontario—Museum staff.

Rare cephalopods from Europe—Ward's Natural Science Establishment.

Mammoth tusks from vicinity of Toronto—W. O'Sullivan.

*Oreodon gracilis*, *Stylomys*, *Promerycochoerus*—Exchange with the University of Chicago.

Dinosaurs and turtles from Alberta—University expedition.

### ZOOLOGY.

The Museum of Zoology is under the direction of Professor B. A. Bensley, and occupies the north portion of the top floor of the building. The first installation of specimens took place in 1914, some time after the establishment of the remaining portions of the Royal Ontario Museum, the nucleus of the new collection having been formed chiefly from Canadian material previously housed in the Biological Museum of the University. Many new additions have been made through the generosity of individual donors and through the co-operation of the Provincial Government and the Parks Department of the City of Toronto. The exhibits illustrate especially the fauna of Canada, all groups of which are represented, though Birds, Mammals and Insects predominate. Some foreign material, more especially of birds, mammal heads and molluscan shells, has been installed as the beginning of a more general collection which will be developed later when more extensive accommodation becomes available.

### ADDITIONS TO COLLECTIONS

During the year 1926-27 the zoological collections were greatly augmented by donations, purchases, and material resulting from expeditions undertaken by members of the staff.

The following were among the more important donations: a collection of birds and mammals of India from Major E. H. Pooler, Toronto; a mounted specimen of an African lion cub from Miss Aleen Hughes, Lindsay, Ont.; several ducks from Mr. F. C. Clarkson, Toronto; a considerable collection of the introduced European starling, together with a number of birds taken on the north shore of the Gulf of St. Lawrence, from Mr. H. F. Lewis, Ottawa; several specimens of Pacific coast fish from Mr. Chas. F. Goodrich of the Sooke Harbour Fishing and Packing Co. Ltd., and R. Spouse and Sons Ltd., of Victoria, B.C.; several books and some bird skins from Mr. J. H. Fleming, Toronto; several birds from Mr. Geo. H. Corsan, Islington, Ont.; skin and horns of Dall's mountain sheep from

Bishop I. O. Stringer of the Yukon Territory; a mounted specimen of Cory's least bittorn from Mr. C. K. Rogers, Toronto; a road runner from Mr. A. K. Boyles, Bexar Co., Texas; coloured lantern slides from Canadian National Parks Branch, Ottawa; numerous specimens from the Parks Department, City of Toronto, the most valuable of which were an elephant, ocelot, cassowary, hoary marmot, pika, demoiselle crane, night heron.

Donations were also received from J. H. Ames, W. G. Arnott, E. H. Bensley, N. K. Bigelow, Fred Blackburn, H. H. Brown, Armon Burwash, Dr. J. A. Campbell, Wm. Campbell, Miss M. Chambers, Major L. S. Dear, Mrs. W. B. Disher, Mrs. J. H. Garnier, Dr. Paul Harrington, Mrs. J. A. Harvey, H. B. Haugh, G. E. Kennedy, Miss J. Kings, Mrs. E. J. Kingsley, W. J. LeRay, R. V. Lindsay, J. A. Lloyd, T. F. McIlwraith, H. H. MacKay, W. G. Neff, Police Sgt. A. Ovens, Lloyd Peters and Wm. Nugent, Brig.-Gen. G. H. Ralston, Dr. F. A. E. Starr, Dr. F. N. G. Starr, L. Sternberg, Mrs. A. Rolls, John Townson, S. L. Thompson, Allan Twining, L. Watson, W. P. Young.

To secure specimens of birds and mammals not represented in our collections a number of small collections were purchased at a nominal valuation, including a collection of the birds of the Muskoka region from Mr. A. Kay of Port Sydney, Ont.; some Pacific coast birds from J. A. Munro, Okanogan Landing, B.C.; a few Manitoba mammals from Stuart Criddle, Treesbank, Man.; Atlantic Coast birds and mammals from C. K. McLeod, Bradore Bay P.O., Elton Jones of Harrington Harbour, P.Q., and Allan Moses of Grand Manan, N.B.

A mounted Impala and seven heads of other African antelopes were also purchased from G. L. Pop of Vancouver, B.C., and a considerable collection of birds' eggs from Mr. Walter Raine, Toronto.

Through the kindness of Mr. Wallace Havelock Robb of Belleville, Ont., we were able to exhibit a notable collection of paintings of birds of Eastern Canada by Major Allan Brooks of British Columbia. This collection has since been presented to the Museum.

Mr. John Mossop of Alcock, Laight and Westwood, Mr. Chas. N. Candee and Mr. W. A. Brodie kindly loaned to the Museum several objects forming part of a special angling exhibit.

Members of the museum staff made collections during the summer of 1928, amounting to 378 specimens, chiefly birds and mammals. Moulds and colour sketches of fifty species of marine fishes of the Pacific coast were also secured as a result of an expedition sent out for that purpose.

The Museum also acquired the pamphlet collection, some books, coloured lantern slides, journals and other records of the late C. W. Nash.

The library was further augmented by the receipt from other museums, scientific societies and individuals of 284 pamphlets.

## PORTRAITS AND WORKS OF ART

The following portraits and works of art have been presented to the University:

1. A portrait of the late Hon. William Hume Blake (oil painting by T. Hamel), presented by the Hon. Edward Blake.
2. A portrait of the Hon. Edward Blake, Chancellor 1876-1900 (oil painting by E. Wyly Grier), presented by graduates and friends.
3. A portrait of Professor E. J. Chapman (oil painting by Miss Frances Sutherland), presented by the artist.
4. A portrait of the late Professor Henry Holmes Croft (oil painting by A. Dickson Patterson), presented by friends of Professor Croft.
5. A portrait of the late President, Dr. McCaul (oil painting by A. Dickson Patterson), presented by the artist.
6. A portrait of the late Hon. Thomas Moss, Chief Justice of Ontario, Vice-Chancellor 1875-1881 (oil painting by Miss C. S. Berthon, copy of oil painting by M. Berthon), presented by the Hon. Charles Moss, Chief Justice of Ontario, Vice-Chancellor of the University.
7. A portrait of the late Right Reverend Bishop Strachan (oil painting copy), presented by the Council of University College.
8. A portrait of the late President, Sir Daniel Wilson (oil painting by A. Dickson Patterson), presented by friends of Sir Daniel Wilson.
9. A portrait of Professor E. J. Chapman (oil painting by A. Dickson Patterson), presented by graduates and friends.
10. A marble bust of the late Professor George Paxton Young (by Hamilton McCarthy), presented by friends of Professor Young.
11. A portrait of the late Professor George Paxton Young (oil painting by W. Allaire Shortt), presented by the artist.
12. A steel engraving of Sir John Colborne, afterwards Lord Seaton, Lieutenant-Governor of Upper Canada from 1830 to 1838, presented by Mr. Henry Hutchison.
13. "The Call to Duty" (oil painting by Paul Giovanni Wickson), presented to the Medical Faculty by the artist.
14. "The Marriage of the Duke of York" and "The King of Denmark's First Visit," commemorative medals, presented by the Town Clerk of London, England.
15. A bronze medal commemorative of the sesquicentennial anniversary of the founding of the College of New Jersey (Princeton University), presented by the trustees of Princeton University.

16. A bronze medal commemorative of the 150th anniversary of the capture of Louisbourg in 1745, presented by the Louisbourg Memorial Committee of the General Society of Colonial Wars.

17. A bronze medal commemorative of the 50th anniversary of Sir George Gabriel Stokes' appointment to a professorship in the University of Cambridge.

18. Busts of Dr. W. T. Aikins, Dr. J. H. Richardson, and Dr. H. H. Wright, by the Medical Faculty and other friends.

19. A bust of the late Hon. George Brown, and a portrait of the late Professor Croft, by Dr. Reeve.

20. Portraits of their Royal Highnesses the Prince and Princess of Wales, presented by their Royal Highnesses as a souvenir of their visit to the University in 1901.

21. A portrait of the Hon. Sir William Mulock, LL.D., ex-Vice-Chancellor of the University, presented by members of the Senate and other friends.

22. A steel engraving after Turner, by the late Sir Daniel Wilson, presented by Charles James Heywood, Esq., Manchester, Eng.

23. A collection of medals and coins, bequeathed by the late Dr. Scadding.

24. A portrait of Professor Goldwin Smith, presented by J. Ross Robertson, Esq.

25. A portrait of Dr. John Hoskin (oil painting by Robert Harris), presented by members of the Board of Governors and of the Senate and other friends.

26. A portrait of Dr. Maurice Hutton, Principal of University College (oil painting by William Cruikshank), presented by the Board of Governors.

27. A portrait of Sir Daniel Wilson, late President of the University of Toronto (oil painting by Sir George Reid), presented by members of the Board of Governors and of the Senate and other friends.

28. A portrait of Dr. R. A. Reeve (oil painting by Curtis Williamson), presented by members of the Board of Governors and of the Senate and other friends.

29. A portrait of Dr. John Galbraith (oil painting by J. W. L. Forster), presented by graduates of the Faculty of Applied Science.

30. A portrait of Dr. James Loudon, ex-President of the University of Toronto (oil painting by William Orpen), presented by the members of the Senate and other friends.

31. A portrait of Dr. James Loudon (oil painting by Frederick Victor Poole), presented by Mrs. Loudon.

32. A portrait of the Hon. Sir William Ralph Meredith, LL.D., Chancellor of the University (oil painting by William Strang),

presented by members of the Board of Governors and of the Senate and other friends.

33. A portrait of the late Hon. Joseph Curran Morrison, Chancellor of the University of Toronto, 1860-1876 (oil painting by Charles Hayward) presented by Judge Hardy of Brockville.

34. A portrait of Dr. William Henry van der Smissen, Professor Emeritus of German in University College (oil painting by Professor Philip Otto Schafer), presented by Mrs. van der Smissen.

35. A bronze medal commemorative of the 300th Anniversary of the founding of the University of Groningen.

36. A portrait of the late John Langton, M.A., Vice-Chancellor of the University of Toronto, 1856-1861 (oil painting by E. Wyly Grier) presented by his surviving sons, W. A. Langton, John Langton and H. H. Langton.

37. A portrait of the late Larratt William Smith, D.C.L., K.C., Vice-Chancellor of the University of Toronto, 1873-1875 (oil painting by G. T. Berthon), presented by his family.

38. "C'est l'Empereur" (oil painting by H. de T. Glazebrook), presented by the artist.

39. A portrait of the late William Oldright, M.A., M.D., Professor of Hygiene in the University of Toronto, 1887-1910 (oil painting by E. Wyly Grier), presented by his children.

40. A portrait of James Mavor, Ph.D., Professor of Political Economy in the University of Toronto (oil painting by Horatio Walker, Esq., LL.D.), presented by the artist.

41. A portrait of Charles Vincent Massey, M.A., a member of the Board of Governors of the University (oil painting by F. H. Varley), presented by friends of Mr. Massey.

42. A portrait of Robert Ramsay Wright, M.A., D.Sc., LL.D., Vice-President and Dean of the Faculty of Arts of the University of Toronto, 1901-1912, and Professor Emeritus of Biology (oil painting by Arnesly Brown), presented by the Board of Governors.

43. A portrait of Alfred Baker, M.A., LL.D., Dean of the Faculty of Arts of the University of Toronto, 1912-1919, Professor Emeritus of Mathematics (oil painting by E. Wyly Grier), presented by members of the Board of Governors of the Senate and other friends.

44. A portrait of William Hodgson Ellis, M.A., M.B., LL.D., Dean of the Faculty of Applied Science and Engineering of the University of Toronto, 1914-1919, and Professor Emeritus of Applied Chemistry (oil painting by E. Wyly Grier), presented by the members of the staff of the Faculty of Applied Science and Engineering.



45. Fifteen water-colour sketches of Canada and Edinburgh by Sir Daniel Wilson, purchased by the Board of Governors.

46. A portrait of Chester Daniel Massey, a member of the Board of Governors of the University from 1906 until 1920 (oil painting by F. H. Varley), presented to the University by the Board of Governors.

47. A collection of engravings of Old Montreal, done by the late Mr. Learmont, from paintings by H. Bunnett, and presented by Mrs. Learmont, of Montreal.

48. A portrait of Professor Irving Heward Cameron, M.B., LL.D., Professor of Surgery in the University of Toronto, 1897-1920 (oil painting by F. H. Varley), presented to the University by the graduates of the Faculty of Medicine.

49. A portrait of the late Professor John Joseph Mackenzie, B.A., M.B., Professor of Pathology and Bacteriology in the University of Toronto, 1900-1922, (oil painting by Allan Barr), presented to the University by friends of Professor Mackenzie.

50. A portrait of Professor John Squair, B.A., Emeritus Professor of French, in University College (oil painting by J. W. L. Forster), presented by friends and associates of Professor Squair.

51. A portrait of Professor Frederick Grant Banting, M.C., M.D., LL.D., D.Sc., Professor of Medical Research in the University of Toronto (oil painting by Curtis Williamson), presented by members of the class of 1917 in Medicine and friends.

52. A portrait of Sir Robert Falconer, K.C.M.G., D.Litt., LL.D., D.D., D.C.L. (Oxon.), President of the University of Toronto (oil painting by Maurice Greiffenhagen), presented by the Board of Governors.

53. A portrait of the Honourable Robert Baldwin (oil painting by E. Wylly Grier), presented by his descendants.

54. A portrait of Professor J. T. Fotheringham, C.M.G., B.A., M.B., M.D., C.M., LL.D., Professor of History of Medicine (oil painting by J. W. L. Forster), presented to Dr. Fotheringham, who in turn, presented it to the University.

55. A portrait of Professor A. P. Coleman, M.A., Ph.D., LL.D., D.Sc., F.R.S., Professor Emeritus (oil painting by J. W. L. Forster), presented by friends.

## THESES ACCEPTED FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

- FREDERICK HUGHES SCOTT. 1900.  
The Structure, Micro-Chemistry and Development of Nerve Cells, with special reference to their nucleic compounds. University of Toronto Studies, Physiological Series No. 1, 1900. Transactions of the Canadian Institute. 1898-99, Vol. 6, Parts 1 and 2, pp. 405-438.
- JOHN CUNNINGHAM MCLENNAN. 1900.  
Electrical Conductivity in Gases Traversed by Cathode Rays. 1900. Philosophical Transactions of the Royal Society of London. Series A, Vol. 195, pp. 49-77.
- WILLIAM ARTHUR PARKS. 1900.  
The Huronian of the Basin of the Moose River. University of Toronto Studies, Geological Series, No. 1, 1900.
- FRANCIS BARCLAY ALLAN. 1901.  
The Basic Nitrates of Bismuth, 1901. American Chemical Journal, Vol. XXV., No. 4, April, 1901, pp. 307-315.
- ROSS GEORGE MURISON. 1902.  
The Mythical Serpents of Hebrew Literature, 1902.
- RICHARD DAVIDSON. 1902.  
The Semetic Permiansive-Perfect, 1902.
- WALTER REUBEN CARR. 1903.  
On the Potential Difference required to produce electrical discharges in gases at low pressure, an extension of Paschen's Law. Transactions of the Royal Society of Canada, Second Series, 1902-03. Vol. VIII, section III., pp. 161-182. 1902.  
On the Laws governing electric discharges in gases at low pressures. Philosophical Transactions of the Royal Society of London, Series A, Vol. 201, pp. 403-433.
- EMMA SOPHIA BAKER. 1903.  
Experiments on the Æsthetic of Light and Colour. University of Toronto Studies, Psychological Series, Vol. I., No. 4.  
Spectrally Pure Colours in Binary Combinations. University of Toronto Studies, Psychological Series, Vol. II., No. 3. 1902.
- GEORGE GALLIE NASMITH. 1903.  
The Chemistry of Wheat Gluten.  
University of Toronto Studies, Physiological Series, No. 4.  
The Transactions of the Canadian Institute, Vol. VII. 1903.
- CLARA CYNTHIA BENSON. 1903.  
The Rates of Reactions in Solutions containing Ferrous Sulphate, Potassium Iodide and Chromic Acid.  
The Journal of Physical Chemistry, May, 1903, pp. 356-388.

- WILLIAM EDINGTON TAYLOR. 1903.  
The Ethics and Religious Theories of Bishop Butler.  
Toronto: The Bryant Press. 1903.
- THOMAS EAKIN. 1905.  
The Text-book of Habakkuk, chap. I. 1-II. 4.  
Toronto: E. D. Apted, n.d.
- THOMAS RUTHERFORD ROBINSON. 1906.  
Stereoscopic Vision and its relation to Intensity and Quality of  
Light Sensation. University of Toronto Studies. Psychological  
Series. Vol. II., Nos. 2 and 3. Reprint. n.d.
- JOHN RANSON ROEBUCK. 1906.  
The rate of the Reaction between Arsenious Acid and Iodine  
in Acid Solution; the rate of the reverse Reaction; and the  
Equilibrium between them.  
The Journal of Physical Chemistry, Vol. VI., p. 365, and Vol.  
IX., p. 727. Reprint. n.d.
- MAITLAND CREASE BOSWELL. 1907.  
The Course of the Oxidation of  $\alpha$ -Naphthoquinone to Phthalic  
Acid and the Detection and Estimation of  $\alpha$ -Naphthoquinone,  
 $\beta$ -Naphthoquinone, Phthalonic Acid and Phthalic Acid.  
Toronto: The University Press. n.d.
- RALPH EMERSON DELURY. 1907.  
The Rate of Oxidation of Arsenous Acid by Chromic Acid and  
the Induction of Arsenious Acid by the Reaction between Chromic  
and Hydriodic Acids.  
The Journal of Physical Chemistry, Vol. XI. Reprint. n.d.
- DAVID STRATHY DIX. 1908.  
Complementarism; Physical and Psychical. University of  
Toronto Studies. Reprint. n.d.
- AUSTIN PERLEY MISENER. 1909.  
The Place of Hosea I.-III. in Hebrew Literature.  
Toronto: E. D. Apted. n.d.
- JOHN FRANCIS MACKEY. 1909.  
Part I.: Some Esters of Arsenious Acid.  
Part II.: Some Esters of Antimony Trioxide. Reprint. n.d.
- CALVIN ALEXANDER MCRAE. 1910.  
The Hebrew Text of Ben Sira (Ecclesiasticus).  
Toronto: Queen Printing Co. n.d.
- WILLIAM ROBERT TAYLOR. 1910.  
The Originality of the Hebrew Text of Ben Sira in the light  
of the Vocabulary of the Versions.  
Toronto: E. D. Apted. n.d.

- WALTER DANIEL BONNER. 1912.  
Experimental Determination of Binodal Curves, Plait Points,  
and Tie Lines in Fifty Systems, each consisting of Water  
and Two Organic Liquids.
- ELI FRANKLIN BURTON. 1910.  
On the Physical Aspect of Colloidal Solution. University of  
Toronto Studies, Physical Series, No. 36.
- SAUL DUSHMAN. 1912.  
The Behaviour of Copper Anodes in Chlorine Solutions.  
The Journal of Physical Chemistry, Vol. XIV. Reprint. n.d.
- JOSEPH ROY SANDERSON. 1912.  
The Relation of Evolutionary Theory to Ethical Problems.
- ABSALOM COSENS. 1913.  
A Contribution to the Morphology and Biology of Insect Galls.
- VIVIAN ELLSWORTH POUND. 1913.  
I. The Absorption of the Different Types of Beta Rays to-  
gether with Study of the Secondary Rays excited by  
them.  
II. On the Secondary Rays excited by the Alpha Rays from  
Polonium. Part I.  
On the Secondary Rays excited by the Alpha Rays from Polo-  
nium. Part II.
- PERCIVAL WILSON SPENCE. 1913.  
Moray Transitions in Israel Between 1200 and 700 B.C.
- EDWARD MOORE JACKSON BURWASH. 1914.  
The Geology of Michipicoten Island.
- ROBERT CORNELL ARMSTRONG. 1914.  
Light from the East, Studies in Japanese Confucianism.
- SAMUEL BEATTY. 1915.  
Extensions of Results Concerning the Derivatives of an Alge-  
braic Function of a Complex Variable.
- ROY BALMER LIDDY. 1915.  
The Relation of Science and Philosophy.
- JAMES BERTRAM COLLIP. 1916.  
On the Formation of Hydrochloric Acid in the Gastric Tubules  
in the Vertebrate Stomach.
- HARDY VINCENT ELLSWORTH. 1916.  
A Study of Certain Minerals from Cobalt, Ontario.
- WILLIAM HARVEY MCNAIRN. 1916.  
Growth of Etch Figures.
- EDWIN JOHN PRATT. 1917.  
Studies in Pauline Eschatology and its Background.

- HENRY FRANKLIN DAWES. 1918.  
Image Formation by Crystalline Media.  
A Lens Refractometer.  
On the Ionisation by Collision in the gases Helium and Argon.
- RAYMOND COMPTON DEARLE. 1919.  
Some Investigations in the Infra-Red Regions of the Spectrum.
- ELLIS INGHAM FULMER. 1919.  
The Action of Certain Poisons and of Ammonium Fluoride on Yeast.
- ARCHIBALD BRUCE MACALLUM. 1919.  
The Relation of Vitamines to the Growth of Young Animals.
- MOSSIE MAY WADDINGTON. 1919.  
The Development of British Thought from 1820 to 1890.
- JAMES HERBERT WHITE. 1919.  
On the Biology of Fomes Applanatus.
- FULTON HENRY ANDERSON. 1920.  
Substance in John Locke's Theory of Knowledge.
- HAROLD KEITH BOX. 1920.  
Dental and Associated Tissues.
- EDWARD HORNE CRAIGIE. 1920.  
On the Relative Vascularity of Various Parts of the Central Nervous System of the Albino Rat.
- ROBERT KAY GORDON. 1920.  
John Galt.
- KENNETH HAY KINGDON. 1920.  
Low Voltage Ionisation.  
Phenomena in Mercury Vapour.  
The Magnetisation of Ships and its Application to the Operation of Magnetic and Electro-magnetic Devices External to the Ship.
- NORMAN ASHMELL CLARK. 1921.  
The Growth Rate of Yeast.
- WALTER ALBERT LAWRENCE. 1921.  
(1) Friedel and Crafts' reaction—intrphthalic anhydrides and acetylaminophthalic anhydrides with benzene and aluminium chloride. (2) Friedel and Crafts' reaction.
- MAURICE EDWARD SMITH. 1921.  
Friedel and Crafts' Reaction—the carbmethoxy—benzoyl chlorides with aromatic hydrocarbons and aluminium chloride.
- GEORGE HOWARD BROTHER. 1922.  
A Study of Some Periodic Phenomena in Electro-Chemistry.
- GEORGE HENRY DUFF. 1922.  
The Development of the Geoglossaceae.

- WALTER RAYMOND FETZER. 1922.  
The Periodic Phenomena observed during the Electrolysis of  
Aqueous Solutions of Sodium Sulphide.
- OLIVER HENRY GAEBLER. 1922.  
Creatine and Creatinine.
- THOMAS CREIGHTON McMULLEN. 1922.  
Friedel and Crafts' Reaction: the Intermediate Compounds  
formed, their properties and Reactions.
- HENRY ALLEN McTAGGART. 1922.  
Electrification of Liquid Surfaces.
- WILLIAM HOWARD MARTIN. 1922.  
The Scattering of Light by Dust-free Liquids.
- PAUL MICHAEL O'SULLIVAN. 1922.  
Studies on the Pathological Physiology of Shock.
- WILLIAM SPAFFORD DYER. 1923.  
Stratigraphy and Palaeontology of the Credit River Section of the  
Upper Cincinnati Series of Ontario.
- MISS NORMA HENRIETTA CARSWELL FORD. 1923.  
A Comparative Study of the Abdominal Musculature of Orthop-  
teroid Insects.
- GEORGE FREDERICK KINGSTON. 1923.  
The Nature of Belief.
- ROBERT JAMES LANG. 1923.  
High Potential Spark Spectra.
- GEORGE HERBERT WILLIAM LUCAS. 1923.  
Chemical Study of Bios.
- CHARLES CLIFFORD MACKLIN. 1923.  
The Skull of a Human Fetus of 43 Millimeters Greatest Length.
- HAROLD GRANT ODDY. 1923.  
Friedel and Crafts' Reaction:—Some preparations from Maleic and  
Fumaric Acids.
- WILLIAM WALKER SHAVER. 1923.  
Some Researches in Spectroscopy and Permeability.
- GORDON MERRITT SHRUM. 1923.  
Some Experiments in Spectroscopy and Low Temperatures.
- HAROLD BOYD SIFTON. 1923.  
Some Characters of Xylem Tissue in Cycads.  
The Bar of Sanio and Primordial Pit in the Gymnosperms.
- WILLIAM EWART STAPLES. 1923.  
The Elihu Speeches in the Book of Job.

- MISS JESSIE GERTRUDE WRIGHT. 1923.  
The Pit-Closing Membrane in the Wood of the Lower Gymnosperms.
- JOHN FRANCIS TODD YOUNG. 1923.  
Studies in Spectroscopy and Magnetism.
- FRANK BOLTON ADAMSTONE. 1924.  
The Distribution and Economic Importance of the Bottom Fauna of Lake Nipigon.
- GARVEN HUGH BERKELEY. 1924.  
Studies on Botrytis.
- HENRY BORSOOK. 1924.  
The Synthesising Action of Pepsin.
- JAMES TRESAWNA BURT-GERRANS. 1924.  
The Diffusion of Copper in Solutions of Copper Sulphate containing Sulphuric Acid.
- DONALD MUNRO FINDLAY. 1924.  
The Reaction of Aqueous Alcoholic Solutions.  
Insulin and some basic dyestuffs.
- RUSSELL EARLE FOERSTER. 1924.  
Studies in the Ecology of the Sockeye Salmon.
- MISS CLARA WINIFRED FRITZ. 1924.  
Cultural Criteria for the Distinction of Wood-destroying Fungi.
- ALEXANDER HENRY LEIM. 1924.  
The Life History of the Shad (*Alosa sapidissima*) with Reference to the Factors Limiting its Abundance.
- FREDERICK REGINALD LORRIMAN. 1924.  
Some Derivatives of Acenaphthene.
- MISS FLORA ISABEL MACKINNON. 1924.  
The Philosophical Writings of Henry More.
- PETER JOSEPH MOLONEY. 1924.  
On the Purification of Insulin.
- JOSEPH ALAN MORRELL. 1924.  
Kinetics of Arginase.
- MISS EDITH MARJORY TAYLOR. 1924.  
The Action of Acids on Yeast.
- PERCIVAL SIDNEY WARREN. 1924.  
The Geology of the Banff Area.
- ALBERT ERNEST ROBERTS WESTMAN. 1924.  
The Relation Between Current Voltage and Length of Carbon Arcs.

- DONALD STUART AINSLIE. 1925.  
Miscellaneous Researches on Magnetic devices and Spectroscopy.
- EDNA VICTORIA EASTCOTT. 1925.  
The Biogens and Their Relation to the two Bioses.
- HELEN ELIZABETH FISHER. 1925.  
Professional Associations in Canada.
- ALBERT HALDANE GEE. 1925.  
The Influence of Sodium Chloride and other Salts on the Growth and Metabolism of Yeast.
- ANDREW ROBERTSON GORDON. 1925.  
Polarization and Concentration change at the Electrode.
- WILFRED BRENTON KERR. 1925.  
The Reign of Terror in France.
- ALEXANDER LACEY. 1925.  
The Romantic Drama in France considered in relationship with the Melodrama of the early Nineteenth Century.
- EZRA HENRY MOSS. 1925.  
Uredinia and Haustoria of the Pucciniastreae.
- JOHN ANGUS NICHOLSON. 1925.  
The Philosophical Teaching of L. T. Hobhouse.
- WALTER NOBLE SAGE. 1925.  
Sir James Douglas and British Columbia.
- DAVID ALYMER SCOTT. 1925.  
The Chemical and Biochemical behaviour of Insulin.
- PAUL ANTHONY WILSON WALLACE. 1925.  
Shakespeare and His Printers.
- ARTHUR MARSHALL WYNNE. 1925.  
The Influence of Acids on the Growth and Metabolism of the Bacillus Granulobacter Pectinovorum.
- ALBERT EDWARD BERRY. 1926.  
Viability of Pathogenic Organisms in Butter.
- ALEXANDER BRADY. 1926.  
William Huskisson and Liberal Reform.
- HSIO YU CHENG. 1926.  
The Oriental Immigration in Canada.
- BLYTHE ALFRED EAGLES. 1926.  
Purine Metabolism; New substances in Corpuscles; Creatine in Brain and Muscle.
- MADELEINE ALBERTA FRITZ. 1926.  
The Stratigraphy and Palaeontology of the Workman's Creek Section of the Cincinnati Series of Ontario.
- EARL JUDSON KING. 1926.  
Reactions of Lactones and of Furfuran Derivatives with Aromatic Hydrocarbons in the Presence of Aluminium Chloride.



- ROLAND RUSK McLAUGHLIN. 1926.  
Some New Rubber Derivatives. A Study of Catalysis by Platinum Black. A Study of Ferric Chloride and Aluminium Chloride in Catalysis. An Investigation of the Deacon Process.
- JACOB MARKOWITZ. 1926.  
Contributions on Carbohydrate Metabolism as influenced by Insulin.
- MATTIE LEVI ROTENBERG. 1926.  
On Photo-electric Conductivity of Diamond and other Fluorescent Crystals. On the Characteristic X-rays from Light Elements.
- HUGH GRAYSON SMITH. 1926.  
Some Studies in Spectroscopy and Refractivity of Gases:  
Changes in the Refractivities of Excited Atoms and Molecules.  
On the fine Structure of the Band Spectra of Sodium, Potassium, and Sodium-Potassium Vapours.  
The Infra-red Spectra of Certain Elements.  
On the Series Spectrum of Palladium.
- GEORGE GORDON BROWN. 1927.  
The Perception of depth with disoriented vision.
- GEORGE BROCKWELL KING. 1927.  
Rabbinical Parallels to the Sermon on the Mount.
- ALEXANDER BOYD McLAY. 1927.  
Some Researches on Line Emission, Absorption and Series Spectra of the Atoms of a Number of Elements.
- WILLIAM CAVEN HUNTER McQUARRIE. 1927.  
Studies in Atomic Structure and Spectroscopy.
- WILLIAM WESLEY SIMPSON. 1927.  
Studies in Intermediary Carbohydrate Metabolism.
- CARL WILLIAM SWEITZER. 1927.  
Light Scattering in Aqueous Salt Solutions.
- ALEXANDER HAMILTON WINGFIELD. 1927.  
Twins and Orphans: The Inheritance of Intelligence.

## EXTENSION LECTURES

These lectures are offered to the public so that it may be possible for those interested, in any part of Ontario, to avail themselves of either single lectures or short courses of lectures on literary and scientific subjects. If requests are made for lectures not found on the present list, an effort will be made to provide them.

The cost of each lecture, if given within the Province of Ontario, consists of the lecturer's travelling and entertainment expenses, plus five dollars. On his return from delivering a lecture, the professor reports to the Extension Office the amount of his expenses; this information is sent forward to the person who arranged for the lecture and a cheque, made payable to the lecturer and at par in Toronto, is then to be mailed to the Extension Office.

Should an organization wish to be supplied with a set of slides and an explanatory bulletin, by means of which an illustrated lecture can be given by some member of the organization, this arrangement can be made, at nominal cost, in any case where a lecture naturally lends itself to this form of treatment.

All correspondence with regard to lectures, and all money paid for lectures or for lecturers' expenses, should be sent to the Director, University Extension, University of Toronto.

E. A. ALLCUTT, M.Sc., Birm., *Associate Professor of Mechanical Engineering.*

1. The Panama Canal. (Illustrated.)
2. Combustion and its Uses. (Illustrated.)
3. Machines for Testing Materials. (Illustrated.)
4. Diesel Engines. (Illustrated.)
5. Mond Gas Plants. (Illustrated.)
6. Suction Gas Plants. (Illustrated.)

LOUIS ALLEN, Ph.D., Chic., *Assistant Professor of French, University College.*

1. The International Language Movement (Esperanto).

G. R. ANDERSON, M.A., A.M., Harv., *Professor of Engineering Physics and Photography.*

A. Various Phases of Illumination:

1. Home Lighting. (Illustrated.)
2. Industrial Lighting. (Illustrated.)
3. Lighting of School Buildings. (Illustrated.)
4. Street Lighting. (Illustrated.)

## B. Photography.

1. Landmarks in the Development of Photography. (Illustrated.)
2. Applications of Photography. (Illustrated.)
3. Photography in colour. (Illustrated.)

W. H. T. BAILLIE, M.A., M.B., *Assistant Professor of Mammalian Anatomy.*

1. Mammals: Ancient and Modern.
2. Some of the Unexplained Wonders of Living Matter.
3. General Biology. What it is and its main problems.
4. The Feeding Habits of Living Creatures.
5. Breathing throughout the Animal Kingdom.
6. Youth, Maturity and Age in Living Creatures.
7. Economic and Theoretical Biology Contrasted.
8. The Physical Basis of Individuality.

V. W. BLADEN, B.A., Oxon., *Lecturer in Political Economy.*

1. Josiah Wedgewood, Captain of Industry.
2. The English Potteries.

G. S. BRETT, M.A., Oxon., *Professor of Philosophy.*

1. Social and Political Movements in India. (Illustrated.)
2. The Main Tendencies in Modern Philosophy.
3. The Development of Psychology in the Nineteenth Century.
4. Aspects of Life and Thought in Mediaeval Europe. (Illustrated.)

J. T. BURT-GERRANS, Phm.B., M.A., *Associate Professor of Electro-Chemistry.*

1. Automobile Storage Batteries. (Illustrated.)

E. F. BURTON, B.A., Cantab., Ph.D., *Professor of Physics.*

1. The Properties of Colloidal Solutions. (With experimental illustrations.)
2. Liquid Air. (With experimental illustrations.)
3. The Structure of the Atom. (Slides.)

J. HOME CAMERON, M.A., *Professor of French, University College.*

1. French Art. (Illustrated.)

C. A. CHANT, M.A., Ph.D., Harvard, *Professor of Astrophysics.*

1. The Einstein Theory and the Australian Eclipse.
2. The Universe of Stars.
3. Our Little System and the Great Beyond.
4. The Planet Mars.

W. H. CLAWSON, B.A., N.B.R., M.A., Ph.D., Harvard, *Associate Professor of English, University College.*

1. Shakespeare's Theatre. (Illustrated.)
2. The Popular Ballads in Britain and America.

A. P. COLEMAN, M.A., M.Sc.Ade., Ph.D., Bres., L.L.D., Qu., D.Sc.Wes. Tor., F.R.S., *Professor Emeritus of Geology.*

1. Geology: The Ice Age, Mountain Building, the Tooth of Time, Volcanoes, Ancient Ice Ages, Geology from a Motor Car, Geology of Toronto, History of the Great Lakes.
2. Geography: The Rocky Mountains, Labrador, Gaspé, South America, South Africa, Australia and New Zealand, India and the Far East, Scandinavia and Spitsbergen, Mexico. The Opening Up of Canada. (All illustrated.)

G. A. CORNISH, B.A., *Associate Professor of Methods in Science, Ontario College of Education.*

1. Egypt in the Days of Tutankhamen. (Illustrated.)
2. The Japanese and their Industries. (Illustrated.)
3. What is going on in Russia. (Illustrated.)
4. Canada's Second Story. (A Lecture on Northern Canada.) (Illustrated.)
5. When China Wakes Up.
6. Our Greatest Travellers. (A Lecture on Birds.) (Illustrated.)
7. The World's Food Supply, or Agriculture of the Future.
8. The History of the Great Lakes.
9. Niagara Falls.
10. Palestine and Mesopotamia. (Illustrated.)
11. The New Europe. (Illustrated.)
12. Turkey and Armenia. (Illustrated.)
13. The Romance of the Cotton Plant. (Illustrated.)

E. A. DALE, M.A., Oxon., *Associate Professor of Latin, University College.*

1. Algernon Charles Swinburne.
2. The Roman Plays of Shakespeare and Jonson Compared.
3. Ballad Poetry.
4. Joseph Conrad.
5. Greek Tragedy and the Greek Theatre.
6. The Genius of Sir Walter Scott.
7. Theories of the Primitive Life and Development of Man in Greek and Latin Literature.
8. The Value of the Greek and Latin Classics to the Modern World.
9. The Vanishing Art of Reading Aloud—What to Read and How to Read It.
10. The Roman World in the Early Days of Christianity.

SAINT-ELME DE CHAMP, B. ès L., Lyons, O.I.P., *Associate Professor of French, University College.*

1. Maria Chapdelaine.
2. Erckmann-Chatrian.
3. Pasteur.
4. The Religious Question of France.
5. The French in Quebec.
6. French-Canadian Literature.

R. D. DEFRIES, M.D., D.P.H., *Associate Professor of Hygiene and Associate Director of Connaught Laboratories.*

1. The Value of the Practice of Preventive Medicine to the Layman.
2. Method of Preparation of Vaccines, Antitoxins and Serums and their use in the Control of Communicable Diseases. (Illustrated.)

N. DEWITT, B.A., Ph.D., Chic., *Dean of Arts and Professor of Latin Literature, Victoria College.*

1. The Seven Hills of Rome. A study of Mediterranean religion in respect to the foundation of cities, including the City of God in Revelation. (Illustrated.)
2. Rome in the Days of Byron and Shelley. A study of the influence of English poets on travel and archaeology in the early nineteenth century. (Illustrated with pictures from old engravings.)
3. The Earliest Monuments of Western Christianity, with special reference to representations of Jesus, who appears as a beardless youth. (Illustrated.)
4. The Saviour Sentiment before the birth of Christ, explaining the part it played in the establishment of the Roman Empire.
5. Roman Paganism as a Religious Experience with Hebrew Parallels, touching upon early ideas of immortality.
6. The Professor and the Business Man. An interpretation of University life suitable for luncheon clubs.
7. Dead Languages and a Living Age. An exposition of the place of Latin and Greek in modern education. Suitable for school audiences.

W. J. DUNLOP, B.A., *Director, University Extension.*

1. Stories from Canadian History.
2. How the University Serves the Public.
3. The Teacher as a Citizen.
4. The Place of Parents in the Educational System.

PELHAM EDGAR, B.A., Ph.D., J.H.U., *William Gooderham Professor of English Literature, Victoria College.*

1. Some Contemporary Women Novelists, such as Edith Wharton, Sheila K. Smith, Ethel Sedgewick, Dorothy Richardson, etc.
2. Canadian Poetry.
3. Dr. Campbell Scott.

O. W. ELLIS, M.Sc., Birm., *Assistant Professor of Metallurgical Engineering.*

1. Brass in the Light of Modern Research. (Illustrated.)
  2. Cast Iron in the Light of Modern Research. (Illustrated.) (Short Course of Four Lectures.)
  3. Defects in Metals and Alloys. (Illustrated.)
  4. Iron and Steel in the Middle Ages. (Illustrated.)
  5. The Metals in Early Days. (Illustrated.)
  6. The Heat Treatment of Steel. (Illustrated.) (Short Course of Four Lectures.)
  7. The Microscopic Study of Metals and Alloys. (Illustrated.)
- NOTE.—Of these lectures Nos. 2 and 6 are of a rather technical nature.

BARKER FAIRLEY, M.A., Leeds, Ph.D., Jena, *Associate Professor of German, University College.*

1. Thomas Hardy's "Dynasts".
2. Canadian Art. (Illustrated.)
3. The Character of German Literature.

J. H. FAULL, B.A., Ph.D., Harv., *Professor of Botany.*

1. Mushrooms: Edible and Poisonous.

J. G. FITZGERALD, M.D., *Professor of Hygiene and Director of the Connaught Laboratories.*

1. Public Health Education, its Bearing on Community Welfare.
2. The Preparation of Antitoxins, Vaccines and Sera, of Value in the Prevention and Control of Communicable Diseases. (Illustrated.)

R. FLENLEY, M.A., Liv., B.Litt., Oxon., *Associate Professor of History.*

1. Some Results of the War of 1914-1918 in Europe and the World. (A survey of the changes brought about by the war on the states of Europe, and the relations of the British Empire and the United States thereto.)
2. Social Life in the Eighteenth Century in England.

MISS MERLE FOSTER, A.O.C.A., *Demonstrator, Royal College of Dental Surgeons.*

- Clay Modelling (Demonstrated).

D. T. FRASER, B.A., M.B., D.P.H., *Assistant Professor of Hygiene and Preventive Medicine.*

1. Health Teaching, Scientific Basis of Health Rules being Taught to School Children. (Illustrated.)

L. GILCHRIST, M.A., Ph.D., Chic., *Associate Professor of Physics.*

1. X-rays and Radioactive-Radiations and their Applications.
2. Light Waves and their Uses.
3. The Production of Colour in Insects and Birds.

P. GILLESPIE, B.A.Sc., C.E., M.Sc., *Professor of Civil Engineering.*

1. Canadian Engineering Achievements of the Past Fifty Years. (Illustrated.)
2. Sanford Fleming, Engineer. (Illustrated.)

G. P. DE T. GLAZEBROOK, B.A., Tor., Oxon., *Lecturer in History.*

1. Some Aspects of the Renaissance Movement.
2. The British Parliamentary System: Its Principles and Modern Development.

E. GOGGIO, A.B., Harv., M.A., Tor., Ph.D., Harv., *Assistant Professor of Italian and Spanish.*

1. Italian Fascismo: Its Origins and Achievements.
2. Italy's Contribution to the World's Literary and Scientific Progress. (A brief survey of Art, Literature and Science.)
3. Literary Relations between Italy and America.
4. Longfellow and Italy.
5. Dante.
6. The Great Poets of Modern Italy.
7. Modern Italian Novelists.
8. Women Writers of Modern Italy.

MISS C. G. HARCUM, B.A., Gouch., M.A., Ph.D., J.H.U., *Assistant Professor of the History of Industrial Art.*

1. The Art of Making Indian Pottery.
2. The Sculpture of the Greeks.
3. The Art of Dining Two Thousand Years Ago.
4. The Romano-British Collection in the Royal Ontario Museum.  
This collection contains a number of objects used by the Romans in Britain from the 1st to the 4th Century, A.D., and shows that at that time a system of hot air furnace heating was in use on the island.
5. Roman Life in the Days of Christ. Illustrated by the Classical Collection in the Royal Ontario Museum.

6. Modern Ways of Ancient Days. A study of Roman private life, illustrated by 100 slides from the Classical Collection in the Royal Ontario Museum, showing children's toys, ladies' toilet articles, cooking utensils, hot water bottles, surgical instruments, etc., of 2,000 years ago.

V. E. HENDERSON, M.A., M.B., *Professor of Pharmacy and Pharmacology.*

1. A Brief History of Architectural Development in Europe. (Illustrated.)
2. A Comparison of French and English Architecture during the period from 1000-1500 A.D. (Illustrated.)

C. D. HOWE, M.S., Verm., Ph.D., Chic., *Dean of the Faculty of Forestry.*

1. The Making of a Tree. (Illustrated.)
2. The Making of a Forest. (Illustrated.)
3. Nature's Forest and Man's Forest. (Illustrated.)
4. Forest Conditions in Canada. (Illustrated.)
5. The Work of the Various Forestry Organizations in the Dominion. (Illustrated.)
6. The need of a Definite Forest Policy in Canada.
7. The Work of a Forester.

G. W. HOWLAND, B.A., M.B., Toronto, M.R.C.P., Lond., *Assistant Professor of Medicine.*

1. Human Conservatories: The Study of Mental Development in our own Homes.
2. Occupational Therapy, its Development and Progress in Ontario's Towns and Cities.

J. G. HUMBLE, B.A., A.M., Harv., Ph.D., Frei., Baden, *Professor of Philosophy.*

1. Some Educational Problems in Ontario:
  - (a) Problems of the Public Schools. (Urban and Rural.)
  - (b) Problems of the High Schools and Technical Schools.
  - (c) Problems of the University.
2. Problems of the Pupil:
  - (a) The Choice of a Life Work.
  - (b) How to think.
  - (c) The Training of the Memory.
  - (d) The Training of the Imagination.
  - (e) Life's Problems and Life's Ideals. (Individual and Social.)
3. How to Study.
4. The Higher Success.



MAURICE HUTTON, M.A., Oxon., LL.D., *Principal of University College, Professor of Greek, University College.*

1. The Roman, Greek, Englishman, and Frenchman. (2 lectures or 1.)
2. The Mind of Herodotus. (2 lectures or 1.)
3. Greece in the Great War.
4. Some Oxford Types.
5. The Art of Lewis Carroll (the author of "Alice in Wonderland").
6. The British and German Mind.
7. Gilbert and Sullivan's Operas.
8. Kipling. (2 lectures or 1.)
9. A Traveller's Notes in Greece.
10. In Paris.
11. The Greek Point of View.
12. Signs of the Times.
13. Gladstone and Disraeli.
14. The Conspiracies of Literature.
15. The Fragments that Remain.
16. By-Products of Democracy.
17. A Retrospect of Fifty Years.
18. National Leagues.
19. Oedipus the King.
20. The Philosophy of Political Parties.
21. Things in General.

H. A. INNIS, M.A., McM., Ph.D., Chic., *Assistant Professor of Political Economy.*

1. The Canadian North. (Illustrated.)

W. A. IRWIN, M.A., D.B., Chic., *Assistant Professor of Semitics.*

1. Stories of Gods and Heroes from Ancient Babylonia.
2. Babylonian Myths and Hebrew Stories.
3. Egyptian Funerary Practices and Beliefs. (Illustrated.)
4. Some Epochs in the History of Ancient Egypt.
5. The God who Died and Rose Again; a Study of the Fertility Cult of the Ancient Near East; the Myths of Osiris, Tammuz, Adonis, etc., particularly in relation to the Religion of Israel.

W. T. JACKMAN, M.A., *Associate Professor of Rural Economics.*

1. Principles underlying the Determination of Railway Rates.
2. Present Condition of the Railways in Canada.
3. Present Railway Problems in Canada:
  - (a) Rates in the Western Provinces.
  - (b) Rates in the Maritime Provinces.
  - (c) The Question of Nationalization.

4. The North Atlantic Freight Conference—Freight Rates on the Ocean.
5. Co-operation in Agriculture.
6. The Effects of Borrowed Capital upon the Farmer's Welfare.
7. Conditions of Permanence of the Agricultural Population:  
Factors necessary to keep Men Permanently on the Land.
8. Rural Credits.

G. M. JONES, B.A., *Associate Professor of Methods in English and History, Ontario College of Education.*

1. The Romance of Canadian History. (Illustrated.) (Choice of the following topics: The French Period, the Seven Years' War, the United Empire Loyalists, Development of the Canadian Constitution.)
2. Canadian Civics:  
Parliamentary Government (one or several lectures).  
The Growth of Canadian Autonomy (one lecture).  
Civic Beauty (one lecture—illustrated.)
3. Shakespeare's Plays. (Illustrated.) The Merchant of Venice, Twelfth Night, Macbeth, A Midsummer Night's Dream.

H. R. KEMP, M.A., *Lecturer in Political Economy.*

1. The Causes of Unemployment
2. Proposed Remedies for Unemployment.
3. Unemployment Insurance.
4. Measuring the Cost of Living.
5. Business Cycles.
6. Taxation in Canada.

D. R. KEYS, M.A., *Professor Emeritus of Anglo-Saxon, University College.*

1. American Humour—Its Genesis and Exodus.
2. King Alfred the Great.
3. Chaucer and his Times. (Illustrated.)
4. The English Novel as a Guide to Conduct.
5. Folk Lore.
6. The Modern Novel.
7. Toronto—Past, Present and Future.
8. World Problems of Our Day.
9. Burns, the Poet of Democracy.
10. Books and Reading for Boys and Girls.

R. S. KNOX, M.A., Aber., B.A., Oxon., *Associate Professor of English, University College.*

1. Scottish Poetry.
2. The English Drama of To-day.
3. John Masefield.
4. The Plays of John Galsworthy.
5. Scottish Humour.
6. The Development of the English Theatre.
7. Shakespeare's England.
8. Some Poets of To-day.

A. T. LAING, B.A.Sc., *Associate Professor of Highway Engineering.*

1. Roads, Ancient and Modern. (Illustrated.)
2. Scenic Highways. (Illustrated.)
3. Canadian National Parks. (Illustrated.)

MISS A. L. LAIRD, M.S., Drex., *Associate Professor of Household Science.*

1. The School Child's Diet. (Illustrated.)
2. Food Constituents for Body Building. (Illustrated.)
3. Vitamins. (Illustrated.)
4. Vegetables and Fruits—Their Place in the Diet. (Illustrated.)
5. A Trip to the West Indies. (Illustrated.)
6. Home Life in Ancient Egypt. (Illustrated.)

W. B. LANE, M.A., Ph.D., Wis., *Ryerson Professor of Ethics, Victoria College.*

1. Pragmatism and Idealism. (One lecture or a series.)
2. Ethical Features of the Modern Flux Philosophy (Bergson). (One lecture, or a series.)
3. Ethics of Kant (or J. S. Mill or Green). (One lecture, or a series.)
4. Nietzsche's Immoralism. (One lecture.)

R. M. MACIVER, M.A., Edin., B.A. Oxon., D.Phil., Edin., *Professor of Political Economy.*

Current Economic Questions.

H. S. MCKELLAR, B.A., *Assistant Professor of French, University College.*

1. Dr. Drummond, the Habitant Poet and Canadian Patriot—a brief biographical sketch, his appreciation of the French-Canadians, with the reading of a few of his poems.
2. A Glimpse of Paris, with lantern slides—a brief historical background with a map of the city and 75 views.
3. French Wit and Scotch Humour—a short study in national characteristics with examples of their wit and humour.

4. Robert Burns—a short biographical sketch; the characteristics of his poetry with the reading of a few of his poems.
5. The Wit and Wisdom of La Fontaine's Fables; the poet's amusing satires on the society of his time.
6. Westminster Abbey, the Shrine of the British Empire—with or without lantern slides.
7. The Catacombs of Rome—with or without lantern slides.

J. F. McLAUGHLIN, B.A., D.D., Vic., *Professor of Oriental Languages and Literature, Victoria College.*

1. History and Monuments of Ancient Egypt. (Illustrated.)
2. History and Monuments of Ancient Mesopotamia. (Illustrated.)
3. Mohammed and his Koran.
4. Poetry and Religion of the Arabs.
5. The Hebrew Prophets.
6. The Hebrew Poets.
7. Modern Movements and Changes in Palestine. (Illustrated.)  
(Nos. 5 and 6 can be given in short courses of five or six lectures.)

H. McTAGGART, M.A., B.A., Cantab., *Associate Professor of Physics.*

1. The Study of Crystal Structures by means of X-rays.
2. Colour Photography. (Illustrated.)

E. S. MOORE, M.A., Ph.D., Chic., *Professor of Economic Geology.*

1. Coal—Its Nature, Origin and Utilization. (Illustrated.)
2. Canada's Mineral Wealth—Past, Present and Future.
3. Expedition to Hudson Bay, the Home of the Eskimo. (Illustrated.)
4. India. (Illustrated.)
5. The Origin of the Earth. (Illustrated.)
6. Earthquakes and Volcanoes, and their Geographical Importance. (Illustrated.)

G. H. NEEDLER, B.A., Ph.D., Leip., *Professor of German, University College.*

1. The German University.
2. Series of Lectures on Periods or Authors in German Literature.
3. Richard Wagner from the Literary Side.
4. Shakespeare in Germany.
5. Goethe's Relations to Scott, Byron, Carlyle, and other English Writers.
6. Germany before the Great War.
7. What has happened to Germany.
8. New Problems of Race, Religion and Politics in Central Europe since the Great War.

J. H. PARKIN, B.A.Sc., M.E., *Assistant Professor of Mechanical Engineering.*

1. Aviation in Canada.

W. A. PARKS, Ph.D., *Professor of Geology.*

1. The Great Fossil Reptiles of Alberta. (Illustrated.)
2. Northern Ontario, Geological Geography. (Illustrated.)
3. The Surficial Geology of Ontario. (Illustrated.)

L. B. PEARSON, B.A., B.A. Oxon., *Lecturer in History.*

1. The Balkan Question.
2. Machiavelli's Models—some Italian despots of the Renaissance period.
3. Oliver Cromwell—hero or hypocrite.

E. J. PRATT, Ph.D., *Associate Professor of English, Victoria College.*

1. Realism in Contemporary English Poetry.
2. The Poetry of Thomas Hardy.

G. D. PORTER, M.B., *Director of Medical Services and Lecturer in Hygiene.*

1. Health Promotion.
2. Tuberculosis and Public Health.

J. C. ROBERTSON, M.A., *W. E. H. Massey Professor of the Greek Language and Philosophy, Victoria College.*

1. A Visit to Greece (Chiefly Athens, Mycenae, Delphi, and Olympia). (One to four lectures, illustrated.)
2. The Legacy of Greece. (One lecture or a course of three lectures.)

T. R. ROBINSON, Ph.D., *Associate Professor of Philosophy.*

1. Thought and Life: The nature and scope of Philosophy; its relation to religion, science, literature and daily life.
2. Philosophies of Life: Views of the nature of the universe and man, in their relation to the problems of life and conduct; illustrated by ancient and modern examples.
3. Present-Day Problems in Social Ethics: Modern economic, political and social conditions in their ethical aspects.
4. The Function of the State in Regard to Morality: What government has to do with making people good.
5. Charles Dickens and his Social Philosophy.
6. The Philosophy of Emerson.
7. Tennyson's Doctrine of Immortality in "In Memoriam". (Short Courses may be given on the subjects of (1) to (4).)

MISS E. K. RUSSELL, B.A., R.N., *Director, Department of Public Health Nursing, and*

MISS F. H. M. EMORY, R.N., *Assistant Director and Lecturer.*

1. Public Health Nursing: a presentation of this subject for pupil nurses of hospital training schools, explaining the nature of the work, opportunities for the future, and the preparation required.
2. Public Health Nursing: a lecture for graduate groups, explaining the nature of the work, and opportunities for special post-graduate training.

P. SANDIFORD, M.Sc., Manc., Ph.D., Col., *Professor of Educational Psychology, Ontario College of Education.*

1. The Measurement of Intelligence. (1 to 6 lectures with demonstrations.)
2. The Psychology of Childhood. (1 to 6 lectures.)
3. The inheritance of Talent among Canadians.
4. The Psychology of School Subjects. (1 to 6 lectures.)

W. SECOCOMBE, D.D.S., *Dean, Faculty of Dentistry.*

Diet and Its Relation to the Teeth.

H. L. SEYMOUR, B.A.Sc., C.E., *Special Lecturer in Town Planning.*

1. Lectures in Town Planning, comprising from one to six lectures. (Illustrated.)

H. B. SIFTON, M.A., *Assistant Professor of Research in Botany.*

1. Poisonous Plants. (Illustrated—one or a series of lectures.)
2. Poisonous Seeds in Feeds. (Illustrated.)
3. Weeds. (Coloured illustrations.)

C. B. SISSONS, B.A., LL.D., *Professor of Ancient History, Victoria College.*

1. The Makers of Ontario.
2. Peculiar Peoples in the Canadian West.
3. The Empire in Ancient and Modern Times.
4. Socrates, Teacher and Citizen.

G. M. SMITH, M.C., B.A., M.A., Oxon., *Associate Professor of History.*

1. Napoleon Bonaparte: a study of his personality.
2. French, British and American Influences in Canadian Civilization.

G. O. SMITH, M.A., Oxon., *Associate Professor of Latin, University College.*

1. The Roman Occupation of Britain. (Illustrated—one lecture.)
2. The Roman Occupation of Britain. (A course of three lectures, two of them illustrated.)
3. Memoirs and Letters of an English Family in the 17th Century.
4. Thackeray.

MISS MARGARET STRONG, B.A., *Instructor in Psychology.*

1. Some Handicaps of Childhood.
2. Some Practical Applications of Child Psychology.
3. Canada and the League of Nations.
4. What the League of Nations is doing for Labour.

R. B. THOMSON, B.A., *Professor of Phanerogamic Botany.*

1. Canadian Wild Flowers. (Coloured lantern slides—one or two lectures.)
2. Medical Folk-lore of Plants. (Illustrated.)
3. The Royal Botanic Garden—Kew. (Illustrated.)
4. South African, Australian or New Zealand Plants and Conditions. (Illustrated.)

J. S. WILL, B.A., Ph.D., *Professor of French, University College.*

1. The France of the French.
2. The Spirit of French Letters.
3. The Modern Novel.
4. Is Literature True to Life?

MISS G. I. WOOKEY, M.A., *Lecturer in English, University College.*

1. Shaw on Shakespeare.
2. Some Tendencies in Poetry To-Day.

C. R. YOUNG, B.A.Sc., C.E., *Professor of Structural Engineering.*

1. Achievements of Engineering. (Illustrated.)
2. Early Engineers and Their Work. (Illustrated.)
3. Contributions of the Engineer to Civilization.
4. Evolution of Transportation. (Illustrated.)
5. Railways. (Illustrated.)
6. Triumphs of Bridge Building. (Illustrated.)
7. Brindley and Smeaton. (Illustrated.)
8. Sir John Fowler and Sir Benjamin Baker. (Illustrated.)
9. The Aesthetics of Bridges. (Illustrated.)
10. Poland's Contribution to Civilization. (Illustrated.)
11. The American Civil War. (Illustrated.)
12. General Robert E. Lee. (Illustrated.)

R. K. YOUNG, B.A., Ph.D., Cal., *Associate Professor of Astronomy.*

1. Recent Discoveries in Astronomy.
2. Measuring the Distances of the Stars and Nebulae.
3. The Evolution of the Stars.

## DEPARTMENT OF ARCHITECTURE:—Lecturers:

C. H. C. WRIGHT, B.A.Sc., *Professor of Architecture.*C. W. JEFFERYS, *Instructor of Freehand Drawing.*H. H. MADILL, B.A.Sc., *Assistant Professor of Mechanical Engineering.*

1. An Outline of the History of Architecture.
2. The University Buildings.
3. Modern Architecture.
4. Modern Domestic Architecture.
5. The Cathedrals of England and France.
6. The Architecture of the French Renaissance.
7. The Architecture of the Renaissance.
8. The Decoration of Public Buildings.
9. The Mural Painters.
10. The Human Element in Pictures.
11. The Making of a Picture.
12. Portrait Painters of Yesterday and To-day.  
(All illustrated.)
13. The Architecture of the Renaissance Period in Italy.
14. The Architecture of the Renaissance Period in England.
15. The Architecture of England and America during recent years.
16. The Architecture of the Great Capitals of Europe—
  - (a) London.
  - (b) Paris.
  - (c) Rome.
17. A Tour through the Cities of Italy.
18. The Architecture of the Modern School.
19. The Architecture of the Church.
20. The Public Square.
21. Sir Christopher Wren and his Works.

## Lantern Slides:

A few sets of lantern slides illustrative of stars, planets, constellations, etc., are available for loan to responsible organizations. An explanatory bulletin accompanies these so that any one with a fair knowledge of astronomy can give, with the aid of the slides, an interesting lecture on the subject. The organization borrowing these slides pays express charges both ways and is responsible for breakages; there is no other cost.

## Star Maps:

Star Maps showing the positions of planets, stars, and constellations at different times of the year are supplied at the rate of one cent each. There are four of these star maps: one for November, December and January; another for February, March and April; a third for May, June and July; a fourth for August, September and October. Those wishing to secure these maps should state for which quarter of the year the maps are required.



## SUPPLEMENTARY LIST

This supplement gives a list of new lectures arranged since the bulletin was printed. Last session a record was kept of attendance at the various lectures delivered throughout the Province, and the aggregate was found to be well over 12,000.

As is well known, the lecture fee is merely nominal. In a professional way, lectures such as those listed could not be secured for ten times the amount stipulated. Unfortunately, it has happened, in a very few centres, that, because the cost is low, no special effort has been made to get out a good audience. A poor attendance is depressing to any lecturer.

It is, therefore, suggested that, whenever a lecture is arranged, no matter how small the organization or the municipality, reasonable advertising be done, tickets be sold in large numbers, and every effort be put forward to secure as good an audience as possible. Enthusiasm on the part of the organizers means a great deal to the success of a lecture.

E. A. ALLCUT, M.Sc., Birm., *Associate Professor of Mechanical Engineering.*

1. Fuels and their Combustion. (Illustrated.)\*
2. Steam Power. (Illustrated.)
3. The Generation of Cold. (Illustrated.)
4. The Water we Breathe. (Illustrated.)
5. The Dangers of Mass Production.
6. Some Aspects of Management.
7. The Principles of Inspection.

\*Could be made a series if required.

W. E. BLATZ, M.A., M.B., Ph.D. Chic., *Assistant Professor of Psychology.*

1. The Nursery School Project. (Illustrated.)
2. Psychology of Infancy and Early Childhood.

JUAN CANO, A.B., Toledo, A.M. Columbia, *Assistant Professor of Italian and Spanish.*

1. The Two Main Characters of Don Quixote.
2. The Modern Spanish Theatre.
3. Great Types in Spanish Literature.
4. The Spanish Novel.
5. Causes of the Fall of Spain as a First Class Power.
6. The Spanish Woman of To-day.
7. Spanish Discoverers and Conquerors.
8. Present and Future of the Spanish-speaking Countries.
9. Spanish Legends.
10. Spanish Customs.
11. Education in Spain.
12. The Spanish Inquisition.

E. H. CRAIGIE, B.A., Ph.D., *Assistant Professor of Comparative Anatomy and Neurology.*

1. The Animal Brain. (Illustrated.)

H. J. DAVIS, M.A., Oxon., *Associate Professor of English, University College.*

1. The Art of Writing (the various styles).
2. The New Reading Public.
3. English Humour.
4. Bernard Shaw and his Public.
5. Thomas Hardy's Novels.

E. GOGGIO, A.B., Harv., M.A. Tor., Ph.D., Harv., *Associate Professor of Italian and Spanish.*

1. Mussolini and Italian Fascismo.
2. Italian Immigration and Canadian Citizenship.
3. Modern Languages and International Understanding.
4. Italy's Contribution to World Civilization.
5. Italian Influences on American Culture.
6. The Italian Renaissance.
7. Famous Italian Women.

MISS C. G. HARCUM, B.A., Gouch., M.A., Ph.D., J.H.U., *Assistant Professor of the History of Industrial Art.*

1. The Sculpture of the Greeks. (Illustrated.) One, two, or three lectures.
2. Picturesque Italy. (Illustrated.)
3. The Story of the Romans in Britain. (Illustrated.)
4. Rome the Eternal City, Its History and Its Art. (Illustrated.)
5. The Dawn of History and Art in Greece. (Illustrated.)  
Showing pictures from the palace of King Minos in Crete, and the early excavations at Mycenae.
6. The A.B.C. of Archaeology. (Illustrated.)
7. The Indians of the Southwest and their Arts. (Illustrated.)

W. J. K. HARKNESS, M.A., *Lecturer in Limnobiology.*

1. Life of Our Inland Waters. (Illustrated.)
2. Commercial Fisheries of Ontario. (Illustrated.)

MAURICE HUTTON, M.A., Oxon., LL.D., *Principal of University College, Professor of Greek, University College.*

1. Some Oxford Types (Old Style).
2. The Degeneracies of the Age.
3. Modern Substitutes for Christianity.
4. Interpretations of Life.
5. The League of Nations.

H. A. INNIS, M.A., M.C.M., Ph.D., Chic., *Assistant Professor of Political Economy.*

1. The Fur Trade of Canada.

T. F. McILWRAITH, M.A., Camb., *Lecturer of Anthropology and Keeper of the Ethnographical Section of the Royal Ontario Museum.*

1. History and Ethnology.
2. Life among the Coastal Indians of British Columbia. (Illustrated.)
3. The Dramatic Dances of the Coastal Indians of British Columbia. (Illustrated.)
4. Folk-lore of the North American Indians.
5. Indian Life in Ontario in pre-Columbian Days. (Illustrated.)
6. Do Egyptian Practices survive in Modern Africa? (Illustrated.)

J. F. MACDONALD, M.A., *Assistant Professor of English, University College.*

1. The Poetry of Thomas Hardy.
2. The Poetry of Kipling.
3. English Poetry of this Generation.
4. Glengarry Memories.
5. Some War Cartoons. (Illustrated.)

E. J. PRATT, Ph.D., *Associate Professor of English, Victoria College.*

1. Newfoundland Sea-faring Life.

T. A. REED, Mus.Bac., *Financial Secretary to the University Athletic Association.*

1. Toronto of Old or The Growth of Toronto from its Earliest Days.

G. M. SMITH, M.C., B.A., M.A., Oxon., *Associate Professor of History.*

1. Subjects of Current Interest in International Relations.

R. B. THOMSON, B.A., *Professor of Phanerogamic Botany.*

1. Plant Breeding—one or a series of lectures.

A. H. YOUNG, M.A., D.C.L. Kings., *Professor of German Trinity College.*

1. University College Forty Years Ago.
2. John Strachan, Founder of King's College and of Trinity College.
3. Goethe's Faust.
4. Michael Angelo.
5. Victor Hugo.

Department of Public Health Nursing Lectures:

MISS E. KATHLEEN RUSSELL, B.A., Reg.N., Director.

MISS FLORENCE H. M. EMORY, Reg.N., Assistant Director.

1. School Nursing: a discussion of the function of the school nurse in the school and the community, and of methods by which she accomplishes her task.

# CATALOGUE OF SPECIAL EVENTS, 1926-1927

1926

- Oct. 3—University Sermon by Rev. F. J. Moore, B.A., B.D., Toronto.
- Oct. 4, 5—Lectures by Professor Léon Noël, Ph.D., D.D., agrégé en philosophie, of the University of Louvain, Belgium.
- Oct. 9, 12, 13, 14—Series of lectures by Professor W. T. Gordon, M.A., D.Sc., F.R.S.E., Professor of Geology in the University of London, England.
- Oct. 10—University Sermon by Rev. W. T. Herridge, D.D., Ottawa.
- Oct. 17—University Sermon by Dr. C. A. Richmond, President, Union College, Schenectady.
- Oct. 24—University Sermon by Professor Shailer Mathews, Chicago.
- Oct. 31—University Sermon by Bishop Francis J. McConnell, Pittsburgh.
- Nov. 2, 3, 4—Series of lectures by Sir Frederick Whyte, K.S.C.I., President of the Indian Legislative Assembly.
- Nov. 4—Debate by the University of Minnesota *vs.* University of Toronto.
- Nov. 9—Lecture by Professor Richard Whiddington, F.R.S., Cavendish Professor of Physics, University of Leeds, England.
- Nov. 11—Memorial Service at the Soldiers' Tower.
- Nov. 12—Debate by the University of Cambridge *vs.* University of Toronto.
- Nov. 14—University Sermon by Rev. W. A. Cameron, B.A., Toronto.
- Nov. 15—Special Convocation for the purpose of conferring the honorary degree of Doctor of Laws upon His Excellency the Viscount Willingdon, Governor-General of Canada.
- Nov. 21—University Sermon by Rev. Robert Norwood, D.D., St. Bartholomew's, New York.
- Nov. 28—University Sermon by Dr. W. Douglas MacKenzie, President, Hartford Seminary Foundation.
- Dec. 5—University Sermon by Rev. G. H. Donald, M.A., Montreal.
- Dec. 12—University Sermon by Rev. Trevor Davies, Toronto.
- Dec. 17—Official Opening of the Varsity Hockey Arena.

1927

- Jan. 4—Special Convocation for the purpose of conferring the honorary degree of Doctor of Laws upon the Rt. Honourable Stanley M. Bruce, Prime Minister of Australia.
- Jan. 9—University Sermon by Rev. F. J. Moore, B.A., B.D., Toronto.
- Jan. 16—University Sermon by Rev. J. R. P. Sclater, D.D., Toronto.
- Jan. 23—University Sermon by Rev. Thomas Eakin, D.D., Toronto.
- Jan. 30—University Sermon by Dr. John R. Mott.
- Feb. 6—University Sermon by Rev. Canon Shatford, Montreal.

- Feb. 13—University Sermon by Professor E. C. Moore, Harvard University.
- Feb. 20—University Sermon by Rev. W. G. Ward, D.D., Montreal.
- Feb. 21, 22, 23, 24—Series of lectures by Sir Herbert Ames, of the League of Nations.
- Feb. 27—University Sermon by the Very Rev. Dean Robbins, Cathedral of St. John the Divine, New York.
- Mar. 6—University Sermon by Professor L. H. Marshall, McMaster University, Toronto.
- Mar. 13—University Sermon by Rev. G. G. Atkins, D.D., Auburn Theological Seminary, U.S.A.
- Mar. 30, 31—Lectures by Prof. Grierson.
- Apr. 5—Balfour Lecture by Dr. W. J. Mayo, LL.D.
- Apr. 19, 20, 21—Series of lectures by Monseigneur Camille Roy, Rector of Laval University.
- June 9—Convocation at which honorary degrees were conferred as follows:

*Doctor of Laws (Honoris Causâ)*

Sir George Newman, K.C.B., M.D., D.C.L., F.R.C.P.  
Gertrude Lawler, M.A.  
George Herbert Locke, M.A.  
Gilbert Acheson Smith, B.A.

## UNIVERSITY OF TORONTO ASSOCIATIONS AND SOCIETIES

1926-1927

## THE ALUMNI FEDERATION OF THE UNIVERSITY OF TORONTO

The Alumni Federation was incorporated in 1922 to represent the graduates of the University as a body. United in the Alumni Federation are the graduates' associations of University College, Victoria College, Medicine, Applied Science and Engineering, Dentistry, Trinity College and St. Michael's College Alumni. The Federation has numerous branches throughout Canada and the United States. *The University of Toronto Monthly*, published from October to June each year, is the official publication of the Federation.

The Federation raised the University War Memorial Fund and erected the Soldiers' Tower. The sum of \$40,000 is being raised to complete the Tower with a clock and carillon of bells. More than \$165,000.00 was loaned to returned soldier students towards their University expenses from the War Memorial Fund. Seventeen scholarships and one Graduate Fellowship, totalling \$4,400, have been established for the year 1926-27.

A Students' Loan Fund of limited resources has been instituted to help undergraduates of the senior years, whose University record and need have been satisfactorily established. The Class of 1895 Loan Fund also provides for emergency short-term loans.

A Bureau of Appointments is conducted for the purpose of assisting graduates and undergraduates in securing employment during the term, for the summer and permanently.

In February, 1925, the Federation nominated eight graduates of the University for appointment by the Lieutenant-Governor-in-Council.

In co-operation with the Board of Governors the Alumni Federation has set up the Banting Research Foundation, which aims to make adequate funds available for the assistance of medical research at the University and elsewhere.

For several years series of popular lectures by members of the staff have been arranged in the interests of University publicity.

The Federation exists only to serve the University and the graduates and welcomes the opportunity of being of service in any possible way.

*President*—Dr. R. T. Noble.

*Vice-President*—T. H. Hogg.

*Board of Directors*—Sir Robert Falconer, A. E. K. Bunnell, Rev. S. Childs, F. A. Dallyn, I. S. Fairty, Dr. J. M. R. Fairbairn, Dr. F. C. Harri-

son, Miss M. Harkins, Mrs. W. A. Kirkwood, W. J. Little, G. H. Locke, W. N. MacQueen, Dr. Elizabeth Stewart, Dr. T. W. G. McKay, Rev. Dr. J. L. Murray, J. L. Ross, H. D. Scully, J. T. Stirrett, Miss E. Wilson, Miss D. Thompson.

## HART HOUSE

*Warden*—J. B. Bickersteth.

*Comptroller*—J. R. Gilley.

*Assistant Comptroller*—W. R. Cowan.

*Director of Theatre*—Walter Sinclair.

*Finance Committee*—M. A. Mackenzie (Chairman), J. B. Bickersteth, V. E. Henderson, H. Wasteneys, C. R. Young, G. A. Cornish, J. R. Gilley (Secretary).

*Board of Stewards*—J. B. Bickersteth (Chairman *ex-officio*), Sir Robert Falconer, The Hon. Vincent Massey, T. A. Reed, H. Wasteneys, C. N. Cochrane, G. N. Kennedy, W. M. Master, W. A. Duncan, W. L. Smith, G. A. Cornish, A. M. Doyle, F. A. Wansbrough, R. H. Soward, G. S. Adamson, C. A. Farewell, J. M. C. Lazier, J. R. Gilley (Secretary).

*House Committee*—J. H. Parkin (Chairman), J. B. Bickersteth, G. H. Duff, J. R. McGillivray, A. G. Lang, A. M. Doyle (Secretary), K. E. Perfect, W. A. Monkhouse, T. R. Sarjeant, J. U. Curtis, W. R. McIntosh, R. D. Ralfe, T. E. Mooney, W. E. McCraw, T. E. Hayhurst, J. R. Gilley.

*Hall Committee*—H. B. Speakman (Chairman), J. B. Bickersteth, H. A. Hoskin, Leo Smith, A. H. McBride, F. A. Wansbrough (Secretary), A. A. Somerville, J. F. McCullough, E. W. M. Paisley, D. C. MacGregor, W. A. Rooke, H. D. Branion, L. E. Simpson, D. B. Dingle, J. F. Mallon, J. R. Gilley.

## FACULTY UNION

Organized 1901

*President*—Sir Robert Falconer, K.C.M.G.

*Secretary-Treasurer*—G. A. Cornish.

*House Committee*—W. J. Dunlop, J. H. Elliott, H. E. Ford, C. W. Jefferys, Leo Smith, R. K. Young.

## STUDENTS' ADMINISTRATIVE COUNCIL

The Students' Administrative Council has developed from the Parliament of Undergraduates which was organized in 1905 with a large membership to afford students of all the Colleges and Faculties the privilege of discussing in open debate questions of interest to them. During the last few years the membership of the Parliament has been reduced as the work became more executive. The Council, as now recognized by the University authorities, has the following duties:—

1. To afford a recognized means of communication between University and Civic authorities and the students.

2. To represent the students on public occasions and in matters affecting their interests.

3. To promote inter-University functions.

4. To co-operate with the Women Students' Administrative Council under the Joint Executive of the Students' Administrative Councils, in the publication of *THE VARSITY, TORONTONENSIS*, the *STUDENTS' HANDBOOK*, and such other publications as may be deemed necessary.

Another innovation is the Students' Council fee, collected by the Bursar, for the use of the Council. This makes possible the employment of a salaried permanent secretary and provides a working capital by means of which a greater efficiency in the management of the various organizations can be attained.

The Council is responsible for Inter-University Debating, the Rooters' Club, and control of student discipline through the Students' Court, and jointly responsible with the Women Students' Administrative Council for the publication of *THE VARSITY, TORONTONENSIS*, and the *STUDENTS' HANDBOOK*.

#### *Executive*

*President*, J. McCulley, B.A.

*Vice-President*, J. Carroll.

*General Secretary-Treasurer*, G. F. Bannerman, B.A.

*President of Students' Court*, W. L. Smith.

*President of Rooters' Club*, T. E. Bingham.

*Chairman of Advisory Board of Student Publications*, W. A. Donohue.

*Chairman of Literary and Debates Committee*, M. T. Newby.

*Representative to Athletic Directorate*, F. S. Daly.

*Representative to Board of Stewards of Hart House*, G. H. Rutherford.

*Executive Member without portfolio*, G. E. Brown.

#### *Council*

*Medicine*, J. B. Laidlaw, R. F. Brown, G. E. D. Wilson, N. L. Murray, D. B. Smith.

*University College*, R. T. L. Innes, C. G. Mitchell, G. G. Morrow, L. MacIntyre.

*Applied Science and Engineering*, G. L. De Laplante, W. A. Duncan, J. W. Deacon, A. C. Lee.

*Dentistry*, C. S. Robertson, W. A. Wolfe, C. A. Ridell, Edward M. Box, W. A. Potter.

*Victoria*, W. H. Norman, M. K. Kenny.

*Forestry*, L. R. Scheult.

*Ontario College of Education*, C. S. Patterson.

*Knox*, J. D. Smart.

*Ontario Veterinary College*, C. M. Steen.

*Student Christian Movement Representative*, F. A. C. Doxsee.

*Athletic Association Representative*, E. Shute.

*Varsity Representative*, C. P. Stacey.



## WOMEN STUDENTS' ADMINISTRATIVE COUNCIL

- President*, Miss L. I. Scott, University College.  
*Vice-President*, Miss M. S. Howard, Victoria College.  
*General Secretary-Treasurer*, Miss A. E. M. Parkes, B.A.  
*Publications Board*, Miss H. G. Irvine, St. Hilda's College.  
*St. Michael's College Representative*, Miss N. F. Kavanagh.  
*Medical Representative*, Miss R. A. Johnstone.

## WOMEN'S ATHLETIC ASSOCIATION

- President*, Miss C. C. Benson, B.A., Ph.D.  
*Vice-President*, Mrs. E. A. Linell.  
*Financial Secretary*, Miss A. E. M. Parkes, B.A.  
*Faculty Representative*, Mrs. M. M. Kirkwood, M.A., Ph.D.  
*Medical Advisor*, Miss E. H. Gordon, B.A., M.B., D.P.H.  
*Physical Directress*, Miss I. G. Coventry.  
*Graduate Representative*, Miss M. R. Thomas.  
*Undergraduate Representatives*, Miss M. C. Addison, Miss E. E. H. Ditchburn, Miss P. M. Griffiths, Miss A. M. Hilliard, Miss R. E. Huggins.

## THE VARSITY

- Editor-in-Chief*, C. P. Stacey.  
*Women's Editor*, Miss F. M. Stinson.  
*Managing Editor*, F. W. Bertram.  
*Women's Managing Editor (Spring)*, Miss D. B. L. Dandeneau.  
*Women's Managing Editor (Fall)*, Miss A. E. Powell.  
*News Editor*, G. M. G. Smith.  
*Women's News Editor (Spring)*, Miss A. F. Weston.  
*Women's News Editor (Fall)*, Miss D. B. L. Dandeneau.  
*Sporting Editor*, J. W. Robson.  
*Women's Sporting Editor (Spring)*, Miss A. E. Powell.  
*Women's Sporting Editor (Fall)*, Miss M. E. Fairbairn.  
*Assistant Managing Editor*, W. I. Stafford.  
*Assistant News Editor*, L. J. Ryan.  
*Assistant Sporting Editor*, N. T. Berry.  
*Music Editor*, M. S. Woodside.  
*Dramatic Editor*, N. A. Benson.  
*Art Editor*, A. L. Watson.  
*Librarian*, H. D. Branion.  
*Associate Editors*, W. A. Donohue, A. H. Ferry, R. C. H. Mitchell, Miss J. M. Heyland, Miss M. E. Fairbairn, F. W. Robertson.  
*Night Editors*, S. Sanofsky, E. J. Hartmann, J. G. Coburn, D. R. Meredith, S. G. Levi, W. Sanders, J. H. Gringorten.  
*Business Manager*, G. F. Bannerman, B.A.

## WOMEN'S PRESS ASSOCIATION

<i>President</i> , Miss A. F. Weston.	<i>Graduate Councillor</i> , Miss F. M. Kincaide, B.A.
<i>Vice-President</i> , Miss F. M. Stinson.	<i>Undergraduate Councillor</i> , Miss H. Ross.
<i>Secretary-Treasurer</i> , Miss D. B. L. Dandeneau.	

## TORONTONENSIS BOARD

<i>Advisory Editor</i> , F. W. Robertson.	<i>Women's Editor</i> , Miss O. Doan.
<i>Editor-in-Chief</i> , G. L. Roberts.	<i>Organizations Editor</i> , V. Wynburne.
<i>Business Manager</i> , G. F. Bannerman, B.A.	<i>Athletic Editor</i> , H. F. Robertson.
	<i>Photography Editor</i> , W. T. Grant.

## STUDENT CHRISTIAN ASSOCIATION

The object of the Association is to create and maintain Christian fellowship among men in the University of Toronto; to develop Christian character; to help prepare men for Christian work and service, and generally to promote the spiritual welfare of the student body.

*Senior Council*

<i>Hon. Chairman</i> , Sir Robert Falconer, LL.D., D.Litt.	Ph.D., C. P. Milne and the executive members of the S.C.A. Cabinet.
<i>Chairman</i> , Professor W. R. Taylor, Ph.D., Professor W. T. Brown,	<i>Treasurer</i> , C. L. Burton, Esq.

*Executive Officers*

<i>Director</i> , The Rev. F. J. Moore.	<i>Secretary</i> , K. C. Evans.
<i>President</i> , W. L. Smith.	<i>Treasurer</i> , P. B. Ayres.
<i>Vice-President</i> , G. B. Smith.	

## CANADIAN OFFICERS TRAINING CORPS

<i>Officer Commanding</i> , Lieut.-Col. T. R. Loudon, late C.E., C.E.F.	"B" Co. ( <i>Med. &amp; Dent.</i> ), Major W. G. Cosbie, M.C., Lieutenants L. E. R. Luckey, C. D. S. Leef, W. R. Aberhart, R. F. Brown, P. J. Murray.
<i>Second-in-command</i> , Major J. R. Cockburn, M.C.	
<i>Adjutant</i> , Lieutenant F. W. Bertram.	"C" Co. ( <i>App. Sc.</i> ), Capt. W. J. T. Wright, M.B.E., Lieutenants J. W. Johnson, J. G. Anderson, H. Miller, A. F. Hunter, R. E. G. Hayward.
<i>Medical Officer</i> , Major J. W. Barton.	
<i>Paymaster</i> , Captain T. A. Reed.	"D" Co. ( <i>Artillery</i> ), Capt. J. M. Robertson.
<i>Contingent Sergt.-Major</i> , S. M. W. Hunt, late Royal Welch Fusiliers.	
<i>Company Officers</i> , "A" Co. ( <i>Arts</i> ), Major H. H. Madill, Lieutenants H. A. Turner, E. H. Smith, O. L. Drummond, E. T. Godwin.	

## THE UNIVERSITY OF TORONTO ATHLETIC ASSOCIATION

The Athletic Association is now the paramount body in University athletics, and has entire jurisdiction over the athletic clubs using the University name, and over their finances, members and policy, subject to the University authorities. Henceforth no financial agreement can be entered into by any such club without the sanction of the Directorate. No expenditure of any kind in connection with any such club can be made without the written order of the Secretary-Treasurer of the Directorate.

The Offices of the Association are in Hart House where all information can be obtained regarding the various branches of sport. A student who wishes to participate in any line of athletics must register at the office of the Secretary before playing with any club, and undergo a medical examination.

## ATHLETIC DIRECTORATE

*Honorary President*—Sir R. A. Falconer, D.Litt., LL.D., C.M.G.

*Faculty Members Appointed by the President*

Professor M. A. Mackenzie, M.A., President

Professor C. H. C. Wright, B.A.Sc.

*Representatives of the Advisory Board*

Dr. J. A. McCollum

Dr. W. E. Brown

*Representative of the Students' Administrative Council*

F. S. Daly

*Student Members elected by the Undergraduates*

W. M. Master

E. Shute

C. A. MORRISON

J. L. Uren

D. B. Peeler

*Medical Director* ..... Dr. G. D. Porter

*Secretary-Treasurer* ..... T. A. Reed

*Hart House Stewards appointed by the Athletic Directorate*

T. A. Reed

J. L. Uren

## GYMNASIUM STAFF

*Gymnasium Director*

D. M. Barton

*Gymnasium Instructors*

W. H. Martin

J. E. McCutcheon

*Swimming Instructor*

W. W. Winterburn

*Fencing Instructors*

C. Walters

F. A. Moore

## LIFE MEMBERS OF THE ATHLETIC ASSOCIATION

Dr. D. Bruce Macdonald	Dr. J. D. Webster
T. A. Russell, B.A.	Dr. W. B. Hendry
Professor A. T. DeLury	Dr. W. P. Thompson
Professor G. H. Needler	J. G. Merrick, B.A.
Professor A. Carruthers	H. C. Griffith, M.A.

## RUGBY CLUB EXECUTIVE

<i>Hon. President</i> . . . . .	Dr. W. B. Hendry
<i>President</i> . . . . .	W. M. Master (Med. V)
<i>Vice-President</i> . . . . .	H. D. Marritt (Med. VI)
<i>Secretary</i> . . . . .	C. M. King (U.C. III)
<i>Manager I Team</i> . . . . .	H. E. Rykert (Med. V)
<i>Manager O.R.F.U. Team</i> . . . . .	S. Teskey (Med. VI)
<i>Manager II Team</i> . . . . .	T. F. Moore (U.C. III)
<i>Manager III Team</i> . . . . .	H. B. L. Jones (U.C. III)
<i>Captain</i> . . . . .	W. B. Snyder (Med. VI)

## SOCCER CLUB EXECUTIVE

<i>Hon. President</i> . . . . .	J. B. Bickersteth, M.A.
<i>Hon. Vice-President</i> . . . . .	Prof. C. B. Sissons
<i>President</i> . . . . .	R. V. Ferguson (Knox Theol.)
<i>Vice-President</i> . . . . .	W. H. H. Norman (Vic. IV)
<i>Secretary</i> . . . . .	A. J. Jackson (U.C. IV)

## ENGLISH RUGBY CLUB EXECUTIVE

<i>Hon. President</i> . . . . .	Prof. M. A. Mackenzie
<i>Hon. Vice-President</i> . . . . .	Prof. C. R. Fay
<i>President</i> . . . . .	A. C. Lee (S.P.S. IV)
<i>Vice-President</i> . . . . .	D. T. MORRIS (S.P.S. IV)
<i>Secretary</i> . . . . .	G. D. Quance (U.C. III)
<i>Captain</i> . . . . .	A. R. Battye (S.P.S. III)

## TRACK CLUB EXECUTIVE

<i>Hon. President</i> . . . . .	Dr. L. J. Sebert
<i>Hon. Vice-President</i> . . . . .	S. P. Biggs
<i>President</i> . . . . .	J. E. Howell (S.P.S. IV)
<i>Vice-President</i> . . . . .	R. A. Cleghorn (Med. V)
<i>Secretary</i> . . . . .	J. W. Graham (Dent. IV)
<i>Assistant Secretary</i> . . . . .	C. A. Morrison (S.P.S. IV)
<i>Manager</i> . . . . .	G. L. DeLaplante (S.P.S. IV)

## HARRIER CLUB EXECUTIVE

<i>Hon. President</i> . . . . .	Dr. E. H. Campbell
<i>Hon. Vice-President</i> . . . . .	Rev. P. J. Dykes, B.A.
<i>President</i> . . . . .	R. M. Mitchell (Med. IV)
<i>Vice-President</i> . . . . .	J. W. Graham (Dent. IV)
<i>Secretary</i> . . . . .	J. K. Crozier (U.C. IV)

## TENNIS CLUB EXECUTIVE

<i>Hon. President</i> . . . . .	Sir Robert Falconer
<i>Hon. Vice-President</i> . . . . .	F. Y. McEachren
<i>President</i> . . . . .	G. Nunns (U.C. III)
<i>Vice-President</i> . . . . .	To be appointed
<i>Secretary</i> . . . . .	K. J. Salmond (U.C. III)

## ROWING CLUB EXECUTIVE

<i>Hon. President</i> . . . . .	Prof. C. H. C. Wright
<i>Hon. Vice-Presidents</i> . . . . .	{ H. Gooderham, Esq., B.A. W. E. Douglas, Esq., B.A. Prof. J. R. Cockburn
<i>Hon. Coaches</i> . . . . .	{ Prof. T. R. Loudon Dr. I. Campbell
<i>President</i> . . . . .	F. A. SIEVERT (S.P.S. IV)
<i>Vice-Presidents</i> . . . . .	{ R. C. LAIRD (Med. V) G. L. Duff (Vic. IV)
<i>Secretary-Treasurer</i> . . . . .	L. E. Marrs (U.C. III)
<i>Committee</i> . . . . .	{ S. D. Thom (Vic. III) W. M. Campbell (S.P.S. III) R. E. Nicholson (Med. IV)

## BOXING, WRESTLING AND FENCING CLUB EXECUTIVE

<i>Hon. President</i> . . . . .	Dr. W. E. Brown
<i>Hon. Vice-President</i> . . . . .	Dr. L. W. Black
<i>President</i> . . . . .	K. A. Fidler (Med. VI)
<i>1st Vice-President</i> . . . . .	D. D. Carrick (U.C. III)
<i>2nd Vice-President</i> . . . . .	F. G. F. Barr (S.P.S. IV)
<i>Secretary</i> . . . . .	G. J. Thompson (St. M. IV)
<i>Boxing Representative</i> . . . . .	H. F. Robertson (Med. V)
<i>Wrestling Representative</i> . . . . .	R. M. Sparling (Dent. IV)
<i>Fencing Representative</i> . . . . .	J. C. A. Campbell (U.C. IV)

## INDOOR BASEBALL CLUB EXECUTIVE

<i>President</i> . . . . .	M. J. Kelly (Med. IV)
<i>Vice-President</i> . . . . .	L. K. Coles (Vic. III)
<i>Secretary</i> . . . . .	T. F. Moore (U.C. III)
<i>Assistant Secretary</i> . . . . .	W. A. Turner (Med. IV)

## LACROSSE CLUB EXECUTIVE

<i>President</i> .....	S. Beatty (U.C. III)
<i>Vice-President</i> .....	H. D. Wallace (U.C. II)
<i>Secretary</i> .....	D. M. Graham (U.C. IV)

## SWIMMING CLUB EXECUTIVE

<i>President</i> .....	A. R. Tilley (Med. V)
<i>Vice-President</i> .....	W. G. Enouy (S.P.S. IV)
<i>Secretary</i> .....	H. Hethrington (Med. V)

## BASKETBALL CLUB EXECUTIVE

<i>President</i> .....	J. R. McGillivray (Med. IV)
<i>Vice-President</i> .....	F. H. A. Gaudin (Med. VI)
<i>Secretary</i> .....	G. A. Lewis (Med. IV)

## HOCKEY CLUB EXECUTIVE

<i>Hon. President</i> .....	J. C. Porter
<i>President</i> .....	C. W. Stollery (U.C. IV)
<i>Vice-President</i> .....	G. S. Evans (U.C. IV)
<i>Secretary</i> .....	T. W. Richards (Dent. IV)

## GYMNASIUM CLUB EXECUTIVE

<i>President</i> .....	D. G. McCrone (S.P.S. IV)
<i>Vice-President</i> .....	R. Lymburner (Med. IV)
<i>Secretary</i> .....	J. A. Williamson (S.P.S. II)

## GOLF CLUB EXECUTIVE

<i>Hon. President</i> .....	Prof. S. H. Hooke
<i>President</i> .....	D. D. Carrick (U.C. III)
<i>Vice-President</i> .....	G. C. Lalor (U.C. IV)
<i>Secretary</i> .....	F. M. Lyon (U.C. IV)

## GYMNASIA

The Physical Department has now five gymnasias. The main floor, 100 × 50 feet, is fitted up with the latest apparatus for all-round class and individual work. The upper gymnasium, 80 × 40 feet, is known as the Games Room, where the interfaculty contests in basketball, indoor baseball and volley ball are played. The teams of the various faculties and colleges have practice hours allotted to them on this floor. There are also the three small gymnasias, each 50 × 30 feet, for boxing, wrestling and fencing, respectively. These three rooms are also fitted up with basketball goals and afford extra practice floors in an emergency.

All the male students of the University are examined by the Medical Director and placed in categories according to their physical fitness. Some form of physical training is compulsory for every student of the first and second years. Students in Category A<sup>1</sup>, that is physically fit, can elect the form of exercise in which they wish to engage. Students in Category A<sup>2</sup> (hardly up to A<sup>1</sup> standard physically), can elect in the same manner, but are limited to certain forms of exercise as recommended by the Physical Director. Students in Category B<sup>1</sup> must take the form of exercise recommended by the Physical Director.

Two gymnasium instructors are in attendance from 9 a.m. to 6 p.m. Classes are held at various hours throughout the day. The Swimming Instructor is in attendance at the pool from 9 a.m. to 6 p.m. Swimmers may use the pool at any time. Non-swimmers must attend at the hours set for them. Students may consult the Medical Director on all matters pertaining to their health.

The Gymnasium Fee is now merged in the Hart House Fee, payable to the Bursar, and compulsory for all male students.

#### HART HOUSE THEATRE

##### *The Syndics*

*Chairman*, Vincent Massey.  
George H. Locke.  
Alice Vincent Massey.  
*Hon. Treasurer*, G. F. McFarland.

##### *Permanent Staff*

*Director*, Walter Sinclair.  
*Stage Manager*, T. Tremain-Garstang.  
*Secretary*, Stella van der Voort.

#### MATHEMATICAL AND PHYSICAL SOCIETY

<i>Honorary President</i> , Dean DeLury.	<i>Corresponding Secretary</i> , Miss A. Keast.
<i>President</i> , C. A. Peachey.	<i>Treasurer</i> , C. L. Bates.
<i>Vice-President</i> , Miss M. Annetts.	<i>Recording Secretary</i> , Miss W. D. Woolcombe.

##### *Representatives*

<i>Graduate</i> , Miss M. E. Westman, B.A.	<i>Second Year</i> , W. D. Douglas.
<i>Fourth Year</i> , W. L. McCutcheon.	<i>First Year (Men's)</i> , N. M. Burns.
<i>Third Year</i> , R. A. Blyth.	<i>First Year (Women's)</i> , Miss T. I. Winter.

#### CHESS CLUB

<i>President</i> , W. P. Wallace.	<i>Arts Representative</i> , A. G. McFarlane.
<i>Secretary-Treasurer</i> , H. Goldhamer.	

## COMMERCE CLUB

<i>Honorary President</i> , Professor W. T. Jackman, M.A.	<i>Treasurer</i> , C. H. Jones.
<i>President</i> , Professor G. E. Jackson, B.A.	<i>Third Year Representative</i> , L. R. Campbell.
<i>First Vice-President</i> , T. P. Keast.	<i>Second Year Representatives</i> , J. H. Crossan, A. H. Miller.
<i>Second Vice-President</i> , O. A. Robertson.	<i>First Year Representatives</i> , H. B. Bell, A. H. McCulloch.
<i>Secretary</i> , N. D. Radcliffe.	<i>Athletic Director</i> , F. N. Dundas.

## MENORAH SOCIETY

<i>President</i> , S. Ciglen.	<i>Chairman, History and Politics</i> , A. Shifrin.
<i>First Vice-President</i> , Miss R. Siegel.	<i>Chairman, Com. Activities</i> , F. Catzman.
<i>Second Vice-President</i> , I. P. Dickler.	<i>Chairman, Jewish Literature</i> , H. Orloff.
<i>General Secretary</i> , J. J. Minsky.	<i>Editor, "Mentor"</i> , S. Rubinoff.
<i>Recording Secretary</i> , Miss D. Pike.	
<i>Treasurer</i> , O. Brown.	
<i>Chairman, Music and Arts</i> , N. S. Goldhar.	

*Representatives*

<i>Junior Arts</i> , M. Starkman.	<i>Dentistry</i> , S. Rosen.
<i>Senior Meds</i> , B. Pollack.	<i>Osgoode Hall</i> , H. Minden.
<i>Pharmacy</i> , S. Roth.	

## WOMEN REPRESENTATIVES TO THE DEBATING UNION

<i>University College</i> , Miss A. M. McCrary, Miss R. E. Howe.	<i>Trinity College</i> , Miss N. I. Wills, Miss J. Finlay.
<i>Victoria College</i> , Miss K. Colborne, Miss A. J. Rittenhouse.	<i>St. Michael's College</i> , Miss V. E. Mueller ( <i>President</i> ), Miss M. Thompson.

## HONOUR SCIENCE CLUB

<i>Honorary President</i> , Professor E. H. Craigie, B.A., Ph.D.	<i>Year Representatives, Fourth Year</i> , R. K. Magee; <i>Second Year</i> , L. W. Plewes, Miss H. I. McKinley;
<i>President</i> , F. B. Plewes.	<i>First Year</i> , E. O. Withrow, Miss E. H. Mader.
<i>Vice-President</i> , Miss M. E. Butler.	
<i>Secretary</i> , J. G. Macnamara.	
<i>Treasurer</i> , F. J. Giffen.	

## THE GERMAN CLUB

<i>Honorary President</i> , Professor G. E. Holt, M.A.	<i>Leader of Music Group</i> , Miss R. Helper.
<i>President</i> , L. Zucker.	<i>Leader of Literature Group</i> , Miss F. Fitzpatrick.
<i>Vice-President</i> , Miss H. Allen.	<i>Leader of Dramatic Group</i> , Miss C. Heller.
<i>Secretary-Treasurer</i> , Miss V. E. Mueller.	



## UNIVERSITY COLLEGE STUDENT SOCIETIES

UNIVERSITY COLLEGE STUDENT CHRISTIAN  
ASSOCIATION

<i>President</i> , W. J. Davis.	<i>Convenors</i> , J. A. Thompson ( <i>Bible Study</i> ), K. C. Evans ( <i>Publicity</i> ), R. O. Fraser ( <i>Missionary</i> ).
<i>Vice-President</i> , D. J. Wilson.	
<i>Secretary</i> , G. D. Quance.	
<i>Treasurer</i> , M. M. McKenzie.	

## LITERARY AND ATHLETIC SOCIETY

<i>Hon. President</i> , H. M. Cody, B.A.	<i>Secretary</i> , A. T. Christie.
<i>President</i> , G. E. Brown.	
<i>Athletic Director</i> , F. D. Denton.	<i>Treasurer</i> , J. W. Millar.
<i>Social Director</i> , R. H. Soward.	<i>Asst. Secretary</i> , R. W. Finlayson.

*Year Representatives*

<i>Fourth Year</i> , F. B. Matthews.	<i>Second Year</i> , E. M. Henry.
<i>Third Year</i> , T. F. Moore.	<i>First Year</i> , J. D. Gibson.

## WOMEN'S LITERARY SOCIETY

<i>Honorary President</i> , Mrs. M. M. Kirkwood, M.A., Ph.D.	<i>Vice-President</i> , Miss F. M. Stinson.
<i>President</i> , Miss M. E. Ness.	<i>Secretary</i> , Miss M. R. Eoll.
	<i>Treasurer</i> , Miss R. Howe.

*Year Representatives*

<i>Fourth Year</i> , Miss H. Ross.	<i>Second Year</i> , Miss L. H. McDougall.
<i>Third Year</i> , Miss C. MacVannel.	<i>First Year</i> , Miss V. L. Maw.

## WOMEN'S UNDERGRADUATE ASSOCIATION

<i>Honorary President</i> , Mrs. M. W. Wallace.	<i>President of First Year</i> , Miss E. C. Fraser.
<i>President</i> , Miss L. I. Scott.	<i>Representative of Women's Literary Society</i> , Miss E. G. Beattie.
<i>Vice-President</i> , Miss P. M. Griffiths.	<i>Representative of Student Christian Association</i> , Miss E. B. Abbott.
<i>Secretary</i> , Miss C. V. L. Scholes.	<i>Representative of Queen's Hall</i> , Miss D. Glaister.
<i>Treasurer</i> , Miss E. M. Parsons.	<i>Representative of U.C. Women's Residences</i> , Miss H. M. Ball.
<i>President of Fourth Year</i> , Miss D. R. Page.	<i>Representative of Social Service</i> , Miss D. F. Harding.
<i>President of Third Year</i> , Miss F. E. Phelps.	
<i>President of Second Year</i> , Miss P. B. Howard.	

## CLASS SOCIETIES

*Fourth Year (Men)*

<i>President</i> , F. B. Matthews.	<i>S. A. C. Representative</i> , R. T. L. Innes.
<i>Secretary</i> , A. B. Plaunt.	<i>Torontonensis Representative</i> , W. B. Craw.
<i>Treasurer</i> , J. T. Garrow.	

*Fourth Year (Women)*

<i>President</i> , Miss D. R. Page.	<i>Treasurer</i> , Miss J. A. Cowan.
<i>Vice-President</i> , Miss M. E. Thompson.	<i>S.A.C. Representative</i> , Miss F. M. Moore.
<i>Secretary</i> , Miss E. M. Mills.	

*Permanent Executive*

<i>President</i> , F. B. Matthews.	<i>Secretary-Treasurer</i> , J. T. Garrow.
<i>Vice-President</i> , Miss L. J. Scott.	<i>Asst. Secretary-Treasurer</i> , Miss D. R. Page.

*Third Year (Men)*

<i>President</i> , T. F. Moore.	<i>Treasurer</i> , R. W. McBurney.
<i>Secretary</i> , R. M. Fowler.	<i>S.A.C. Representative</i> , C. G. Mitchell.

*Third Year (Women)*

<i>President</i> , Miss F. E. Phelps.	<i>Treasurer</i> , Miss H. M. MacCallum.
<i>Vice-President</i> , Miss D. S. Wood.	<i>S.A.C. Representative</i> , Miss J. N. Kennedy.
<i>Secretary</i> , Miss J. M. Forster.	

*Second Year (Men)*

<i>President</i> , E. M. Henry.	<i>Treasurer</i> , G. A. Gale.
<i>Secretary</i> , R. A. F. Anderson.	<i>S.A.C. Representative</i> , G. Morrow.

*Second Year (Women)*

<i>President</i> , Miss P. B. Howard.	<i>Treasurer</i> , Miss E. C. Gibson.
<i>Vice-President</i> , Miss M. O. Hilchie.	<i>S.A.C. Representative</i> , Miss E. M. Westman.
<i>Secretary</i> , Miss O. B. Goettler.	

*First Year (Men)*

<i>President</i> , J. D. Gibson.	<i>Treasurer</i> , J. B. Smith.
<i>Secretary</i> , R. R. Mabee.	<i>S.A.C. Representative</i> , L. McIntyre.

*First Year (Women)*

<i>President</i> , Miss E. C. Fraser.	<i>Treasurer</i> , Miss M. L. Husband.
<i>Vice-President</i> , Miss M. C. Watson.	<i>S.A.C. Representative</i> , Miss C. M. Gray.
<i>Secretary</i> , Miss M. I. M. Niven.	

## CLASSICAL ASSOCIATION

<i>Hon. President</i> , Professor D. Duff, M.A., B.D.	<i>Fourth Year Councillor</i> , Miss H. I. MacTaggart.
<i>President</i> , Miss M. R. Dale.	<i>Second Year Councillor</i> , M. G. Gould.
<i>Vice-President</i> , W. P. Wallace.	<i>First Year Councillor</i> , Miss F. F. Dale.
<i>Treasurer</i> , J. M. Cowan.	
<i>Secretary</i> , M. St. A. Woodside.	

## THE FRENCH SOCIETY

<i>Honorary President</i> , Professor J. S. Will, B.A., Ph.D.	<i>Treasurer</i> , C. Wright.
<i>President</i> , J. K. Crozier.	<i>Publicity Manager</i> , Miss M. H. Lake.
<i>Vice-President</i> , Miss M. R. Hiltz.	<i>Business Manager</i> , J. C. Risk.
<i>Secretary</i> , Miss I. G. Balthazard	<i>First Year Representative</i> , Miss L. Skinner.

## PLAYERS' GUILD

<i>Hon. President</i> , Professor E. A. Dale, M.A.	<i>Secretary</i> , Miss E. A. Barton.
<i>Director</i> , R. Card.	<i>Treasurer</i> , Miss M. R. Eoll.
<i>President</i> , C. P. Stacey.	<i>Publicity Manager</i> , Miss P. Godfrey.
<i>Vice-President</i> , Miss D. R. McEvoy.	<i>Stage Manager</i> , S. H. Dale.

## VICTORIA COLLEGE STUDENT SOCIETIES

## THE STUDENTS' PARLIAMENT

<i>President</i> , F. S. Daly.	<i>Debating Director</i> , H. G. Soward.
<i>Vice-President</i> , R. H. Turnbull, B.A.	<i>Social Caput Representative</i> , C. C. Misener.
<i>Secretary-Treasurer</i> , F. A. Wansbrough.	<i>Students' Administrative Council Representative</i> , M. K. Kenny.
<i>Social Director</i> , G. M. Bastedo.	

## THE STUDENTS' COURT

<i>Chief Justice</i> , R. H. Turnbull, B.A.	<i>Clerk of Court</i> , P. Ayres.
<i>Judges</i> , C. E. J. Cragg, H. A. Mellow, George Service.	<i>Prosecuting Attorney</i> , D. M. Smith, B.A.

## WOMEN'S LITERARY SOCIETY

<i>Hon. President</i> , Mrs. E. J. Pratt.	<i>Vice-President Current Events</i> , Miss K. H. Coburn.
<i>President</i> , Miss E. C. Caswell.	<i>Secretary-Treasurer</i> , Miss M. M. Henderson.
<i>Vice-President Debating</i> , Miss A. J. Rittenhouse.	<i>Publicity</i> , Miss E. K. West.
<i>Vice-President Literary</i> , Miss D. D. Endicott.	<i>Acta Representative</i> , Miss M. K. Hunt.
<i>Vice-President Art</i> , Miss B. E. Snell.	

## THE MUSIC CLUB

<i>Hon. President</i> , J. G. Kerr.	<i>Publicity Manager</i> , W. E. L. Lee.
<i>Vice-President</i> , Miss K. M. Fergusonson.	<i>Secretary</i> , Miss M. M. Graham.
<i>Business Manager</i> , J. E. W. Sterling.	<i>Master of Properties</i> , W. J. Barley.
<i>Assistant Business Manager</i> , Miss M. D. Lewis.	<i>Director</i> , Mr. George Stewart.

## WOMEN'S ATHLETIC CLUB

<i>President</i> , Miss C. E. Mooney.	<i>Baseball Curator</i> , Miss J. L. Gibson.
<i>Secretary-Treasurer</i> , Miss M. E. M. Buchanan.	<i>Swimming</i> , Miss M. C. Rieder.
<i>Hockey Curator</i> , Miss H. Richardson.	<i>Fourth Year Representative</i> , Miss D. E. Carver.
<i>Basketball Curators</i> , Miss D. L. Ker, Miss D. R. Shoemaker.	<i>Third Year Representative</i> , Miss J. E. Bateman.
<i>Tennis Curator</i> , Miss R. E. Duggan.	<i>Second Year Representative</i> , Miss J. M. Snider.

## WOMEN'S UNDERGRADUATE SOCIETY

<i>President</i> , Miss M. S. Howard.	<i>Third Year Representative</i> , Miss E. M. Leitch.
<i>Vice-President</i> , Miss J. A. Murray.	
<i>Secretary</i> , Miss M. A. Forward.	<i>Second Year Representative</i> , Miss A. I. Wingfield.
<i>Treasurer</i> , Miss M. Rieder.	

## STUDENT CHRISTIAN MOVEMENT

<i>President</i> , Miss M. C. Addison.	<i>Group Convenor</i> , Miss E. M. Tyhurst.
<i>Vice-President</i> , Miss D. D. Endicott.	<i>Social Service Convenor</i> , Miss F. A. Service.
<i>Secretary</i> , Miss K. P. Christie.	<i>Publicity</i> , Miss E. A. Evans.
<i>Assistant Treasurer</i> , Miss B. E. Snell.	<i>Second Year Representative</i> , Miss M. E. Wilkinson.

*Men's Executive*

<i>President</i> , W. H. Norman.	<i>Fourth Year Representative</i> , S. C. Sifton.
<i>Second Vice-President</i> , R. C. Spooner.	<i>Second Year Representative</i> , J. G. Cooper.
<i>Secretary</i> , F. R. Lindsay.	<i>First Year Representative</i> , F. Gamble.
<i>Treasurer</i> , F. M. Cryderman.	
<i>Publicity</i> , H. C. Hall.	
<i>S.V.M.</i> , H. B. Collier.	

## ATHLETIC UNION

<i>Hon. President</i> , Rev. A. J. Johnston, B.A., D.D.	<i>Treasurer</i> , S. D. Thom.
<i>President</i> , J. E. W. Sterling.	<i>Secretary</i> , M. K. Kenny.
<i>First Vice-President</i> , H. C. Hall.	<i>First Year Representative</i> , W. H. Atkinson.
<i>Second Vice-President</i> , G. L. Dunn.	

*Representatives of Various Sports*

J. C. Stevenson, H. M. Crosby,	wood, W. W. Deroche, W. S.
E. G. Howe, D. G. Cannon,	Hall, C. E. Pyne, R. C. Spooner,
J. E. McCallum, W. W. Lock-	J. W. Keffer.

## CLASSICAL ASSOCIATION

<i>Honorary President</i> , Dr. A. J. Bell.	<i>Third Year Representative</i> , J. C. Stevenson.
<i>President</i> , H. J. Wonnacott.	
<i>Vice-President</i> , Miss M. A. Forward.	<i>Treasurer</i> , Miss G. B. Wesley.
<i>Fourth Year Representative</i> , Miss O. L. Cooper.	<i>Second Year Representative</i> , S. H. Gould.

## DRAMATIC SOCIETY

<i>President</i> , J. E. McCallum.	<i>Stage Manager</i> , H. B. Collier.
<i>1st Vice-President</i> , Miss M. C. Tow.	<i>Assistant Manager</i> , R. C. Spooner.
<i>2nd Vice-President</i> , Miss I. E. Pugh.	<i>Mistress of the Wardrobe</i> , Miss H. C. Deroche.
<i>Secretary</i> , Miss K. P. Christie.	<i>Mistress of Properties</i> , Miss R. C. McCulloch.
<i>Business Manager</i> , C. N. Carscallen.	<i>Director</i> , Mrs. F. J. Moore.
<i>Assistant Business Manager</i> , J. B. Moore.	

## ORCHESTRA

<i>Honorary President</i> , Miss M. E. T. Addison, B.A.	<i>Librarian</i> , Miss E. Blair.
<i>President</i> , Miss L. Peart.	<i>Business Manager</i> , George Hames, B.A.
<i>Vice-President</i> , R. V. Wilson.	
<i>Secretary</i> , J. V. Bourke.	<i>Conductor</i> , Mr. Frank E. Blachford.

## YEAR EXECUTIVES

*First Year*

<i>Fall Term</i>	<i>Spring Term</i>
<i>President</i> , H. R. White.	<i>President</i> , A. H. McCulloch.
<i>Vice-President</i> , Miss H. T. Day.	<i>Vice-President</i> , Miss M. Scott.
<i>Secretary</i> , Miss R. A. Sargeant.	<i>Secretary</i> , Miss M. E. Lewis.

*Second Year*

<i>President</i> , J. R. Johnston.	<i>President</i> , C. L. Bates.
<i>Vice-President</i> , Miss M. Rieder.	<i>Vice-President</i> , Miss D. Ker.
<i>Secretary</i> , Miss G. Irwin.	<i>Secretary</i> , Miss D. Doyle.

*Third Year*

<i>President</i> , W. J. Addison.	<i>President</i> , H. J. Mahoney.
<i>Vice-President</i> , Miss E. K. West.	<i>Vice-President</i> , Miss K. E. M. Ferguson.
<i>Secretary</i> , Miss M. E. Redmond.	<i>Secretary</i> , Miss E. E. Acheson.

*Fourth Year*

<i>President</i> , W. W. Lockwood.	<i>Secretary</i> , Miss M. Hutchison.
<i>Vice-President</i> , Miss D. M. Shaver.	

## ACTA VICTORIANA

- Editor-in-Chief*, R. G. Everson.  
*Literary Editors*, Miss M. K. Hunt,  
C. E. J. Cragg.  
*Locals' Editors*, Miss E. J. Lamont,  
W. E. L. Lee.  
*Personals' Editors*, Miss K. H.  
Coburn, J. C. Stevenson.  
*Athletic Editors*, Miss A. M. Shaver,  
W. I. Stafford.
- "The Monocle" Editors*, Miss E. C.  
Caswell, H. P. Gundy.  
*Scientific Editor*, H. B. Collier.  
*Religious Editor*, R. H. Turnbull.  
*Business Manager*, W. H. Norman.  
*Circulation Managers*, Miss K. P.  
Christie, M. K. Kenny.

## TRINITY COLLEGE STUDENT SOCIETIES

## HEAD OF COLLEGE

D. S. Catchpole, B.A.

## SCRIBE OF EPISKOPON

D. S. Catchpole, B.A.

## THE LITERARY INSTITUTE

The Institute exists for the encouragement of debating, essay writing and reading. It meets on Friday evenings throughout the two terms. The fee is \$3.00 per annum and is payable with the College bills.

## THE COUNCIL

*Speaker*, D. S. Catchpole, B.A.*Keeper of the Mace*, W. N. Hovey.*President*, E. M. Reid.*Curator*, R. E. Bradshaw.*First Vice-President*, W. B. Jennings.*Treasurer*, W. H. Waugh.*Second Vice-President*, R. R. A. Baldwin.*Opposition Committee*, J. A. Wright,*Secretary*, M. T. de Pencier.

F. S. Edgar, C. D. Stewart, D. T.

*Debating Secretary*, D. G. Guest.

Morris.

## THE REVIEW

The "Trinity College Review" is published once a month throughout the academic year. The annual subscription is \$1.50.

*Board of Management**Chairman*, A. H. Young, M.A.,  
D.C.L. (*Convocation Editor*).*Literary Editor*, L. C. Crosthwait.*Editor-in-Chief*, E. M. Reid.*Science Editor*, H. M. Barrett.*Business Manager*, M. T. de Pencier.*Athletic Editor*, H. D. Branion.*Advertising Manager*, G. B. Armstrong.*Associate Editors*, D. S. Catchpole,  
B.A., W. L. Smith, G. W. Ralfe,

W. K. Morrison, B.A., R. H.

Loosemore, D. G. McCullagh.

*Exchange Editor*, G. B. Woods.*St. Hilda's Notes*, Miss G. Carter.

## ATHLETIC ASSOCIATION

*President*, W. H. Waugh.*Asst. Treasurer*, R. Turnbull.*Vice-President*, W. E. Weaver.*Reporter*, E. H. Costigan.*Secretary*, J. M. Macpherson.*Curator*, S. S. Clarke.*Treasurer*, Rev. S. Childs, B.A.,  
B.D.*Committee*, D. T. Morris, J. A.

Wright, W. N. Hovey.



## THE DRAMATIC SOCIETY

<i>President</i> , E. M. Reid.	<i>Curator</i> , D. G. Guest.
<i>Vice-President</i> , F. S. Edgar.	
<i>Secretary</i> , G. W. Ralfe.	<i>Councillors</i> , H. D. Branion, Miss M.
<i>Treasurer</i> , R. R. A. Baldwin.	J. Lee, Miss V. B. Ben-Oliel.

## THE SCIENCE CLUB

<i>President</i> , M. T. de Pencier.	<i>Secretary</i> , H. D. Branion.
<i>Vice-President</i> , R. Turnbull.	<i>Curator</i> , W. A. Hovey.
<i>Treasurer</i> , J. J. Bowden.	<i>Science Editor</i> , H. M. Barrett.

## BROTHERHOOD OF ST. ANDREW

<i>Chaplain</i> , The Reverend the Provost.	<i>First Vice-Director</i> , H. G. M. Ayre.
<i>Honorary-Director</i> , R. P. Walker.	<i>Second Vice-Director</i> , J. L. Hutchinson.
<i>Director</i> , C. N. Palmer.	<i>Secretary-Treasurer</i> , L. Sampson,

## THE THEOLOGICAL SOCIETY

<i>Honorary President</i> , The Reverend the Provost.	<i>President</i> , W. G. Brewer.
<i>Honorary Vice-Presidents</i> , The Members of the Teaching Staff in Divinity.	<i>Vice-President</i> , S. S. Clarke.
	<i>Secretary-Treasurer</i> , L. Sampson.
	<i>Council</i> , R. E. Bradshaw, W. L. Smith.

## ST. HILDA'S COLLEGE STUDENT SOCIETIES

## HEAD OF COLLEGE

Miss H. G. Irvine

## SCRIBE OF EPISKOPON

Miss U. M. McIntyre

## LITERARY SOCIETY

<i>First Honorary President</i> , Miss Cartwright, B.A.	<i>Vice-President</i> , Miss H. W. Burns.
<i>Second Honorary President</i> , Miss M. E. Dick.	<i>Recording Secretary</i> , Miss E. L. Jermyn.
<i>First Honorary Vice-President</i> , Miss W. Luxton.	<i>Corresponding Secretary</i> , Miss E. E. H. Ditchburn.
<i>President</i> , Miss I. G. Harris.	<i>Treasurer</i> , Miss M. J. J. Finlay.
	<i>Ex-Officio</i> , Miss R. M. Anderson.

## INTER-COLLEGE DEBATING UNION

<i>Senior Representative</i> , Miss N. I. Wills.	<i>Junior Representative</i> , Miss K. J. J. Finlay.
--	--

## THE CHRONICLE

<i>Editor-in-Chief</i> , Miss N. I. Wills.	<i>Assistant Business Manager</i> , Miss F. A. Turner.
<i>First Sub-Editor</i> , Miss M. H. Moore.	<i>Graduate Notes</i> , Mrs. F. P. Lloyd, B.A.
<i>Second Sub-Editor</i> , Miss L. Burgoyne.	<i>Graduate Member</i> , Miss L. Hill, B.A.
<i>Third Sub-Editor</i> , Miss D. M. Sanders.	<i>Representative on the Varsity</i> , Miss M. B. Johnson.
<i>Fourth Sub-Editor</i> , Miss C. E. Clarke.	<i>Member of Torontonensis Board</i> , Miss C. M. A. Bell.
<i>Business Manager</i> , Miss M. G. Chisholm.	<i>Editor of St. Hilda's Notes, Trinity Review</i> , Miss G. M. Carter.
<i>Advertising Manager</i> , Miss M. E. Schofield.	

## THE W.A.

<i>President</i> , Miss U. M. McIntyre.	<i>Head of Dorcas</i> , Miss D. M. S. Comber.
<i>Vice-President</i> , Miss N. M. Larsen.	<i>Head of Poster Committee</i> , Miss C. E. Clarke.
<i>Secretary</i> , Miss D. M. Sanders.	<i>Head of Social Service</i> , Miss A. V. Parker.
<i>Treasurer</i> , Miss C. E. Clarke.	<i>Asst. Head of Social Service</i> , Miss E. E. H. Ditchburn.
<i>Second Year Representative</i> , Miss K. E. Woodroffe.	<i>Asst. Head of Choir</i> , Miss V. BenOliel.
<i>Head of Mission Study</i> , Miss I. G. Harris.	
<i>Head of Choir</i> , Miss H. G. Irvine.	
<i>1st. Head of Mission Study</i> , Miss D. M. Sanders.	

## ATHLETIC ASSOCIATION

<i>Honorary President</i> , Miss E. V. Brett.	<i>Head of Tennis</i> , Miss D. M. Fraser
<i>Honorary Vice-President</i> , Miss M. M. Martin.	<i>Head of Hockey</i> , Miss C. M. Cockburn.
<i>President</i> , Miss C. M. A. Bell.	<i>Head of Basketball</i> , Miss H. E. Oliver.
<i>Vice-President</i> , Miss H. W. Burns.	<i>Curator of Swimming</i> , Miss M. B. Johnston.
<i>Secretary</i> , Miss D. H. Cox.	<i>Head of Baseball</i> , Miss V. BenOliel.
<i>Treasurer</i> , Miss M. E. Langstaff.	

## ALUMNAE ASSOCIATION

<i>President</i> , Mrs. Dykes.	<i>Executive Committee</i> , Mrs. Clatworthy, Mrs. Sawers, Miss Martin, Miss Newton.
<i>Secretary-Treasurer</i> , Miss Pittman.	
<i>Corresponding Secretary</i> , Miss Pickford.	<i>Representative to Local Council</i> , Miss Westacott.

## ST. MICHAEL'S COLLEGE STUDENT SOCIETIES

## STUDENTS' ADMINISTRATIVE COUNCIL

*President*, W. A. Donohue.*Secretary*, G. C. Power.*Vice-President*, J. G. Hanley.*Councillors*, F. Mallon, D. Walsh.

## ATHLETIC ASSOCIATION

*Convenor*, Rev. W. J. Story, B.A.*Secretary*, C. McAlpine.*President*, G. Thompson.*Councillors*, C. P. O'Neill, W. J. Clark, W. Regan.

## THE YEAR BOOK STAFF

*Convenor*, Rev. B. Sullivan, M.A.*Editor-in-Chief*, E. J. Hartmann.*Business Manager*, V. J. Bourke.*Literary Staff*, W. J. O'Meara, H. J.*Business Staff*, L. M. Knowlton,

Haffey, J. G. Hanley, G. C.

G. J. Thompson, J. M. King,

Power, T. E. Mooney, L. J.

J. F. Mallon, C. P. O'Neill;

Ryan, Miss M. L. Bradley, Miss

D. C. C. Walsh, W. J. Robertson.

M. L. Burcher.

## QUINDECIM (POLITICAL CLUB)

*Honorary President*, Rev. Henry Carr, LL.D.*Vice-President*, M. Quinlan.*President*, W. A. Donohue.*Secretary*, B. O'Boyle.

## ORATORICAL CLUB

*President*, H. J. Haffey.*Secretary*, E. Austin.*Vice-President*, C. McAlpine.

## FACULTY OF MEDICINE SOCIETIES

## MEDICAL SOCIETY

<i>Hon. President</i> , Dean Primrose.	<i>President, Athletic Society</i> , H. D. Marritt.
<i>Hon. Treasurer</i> , Dr. E. A. Linell.	
<i>President</i> , G. H. Rutherford.	<i>Musical Director</i> , A. L. Morgan.
<i>Vice-President</i> , O. A. Kilpatrick.	<i>Varsity Representative</i> , J. H. Westheimer.
<i>Secretary-Treasurer</i> , J. A. Fallon.	
<i>Asst. Secretary-Treasurer</i> , J. Lind.	

## ATHLETIC SOCIETY

<i>Hon. President</i> , Dr. G. C. Cameron.	<i>Third Year Representative</i> , W. A. Monkhouse.
<i>President</i> , H. D. Marritt.	<i>Second Year Representative</i> , J. R. E. Morgan.
<i>Vice-President</i> , L. M. Mullen.	<i>First Year Representative</i> , A. Burnett.
<i>Secretary-Treasurer</i> , R. M. Mitchell.	
<i>Quartermaster</i> , J. W. A. Greig.	

## CLASS EXECUTIVES

*Sixth Year*

<i>President</i> , L. A. Macklin.	<i>Secretary</i> , Miss A. M. Hilliard.
<i>Vice-President</i> , E. P. Patterson.	<i>Treasurer</i> , F. D. Linton.

*Fifth Year*

<i>President</i> , W. M. Master.	<i>Secretary</i> , Miss M. J. Thompson.
<i>Vice-President</i> , K. G. Gray.	<i>Treasurer</i> , J. G. Shannon.

*Fourth Year*

<i>President</i> , O. L. Stanton.	<i>Secretary</i> , Miss M. Cosens.
<i>Vice-President</i> , S. V. Railton.	<i>Treasurer</i> , H. A. Ansley.

*Third Year*

<i>President</i> , J. E. Long.	<i>Secretary</i> , Miss M. K. Patterson.
<i>Vice-President</i> , W. S. Kergin.	<i>Treasurer</i> , W. W. D. Williams.

*Second Year*

<i>President</i> , H. Ebbs.	<i>Secretary</i> , Miss M. A. Walter.
<i>Vice-President</i> , J. M. Spence.	<i>Treasurer</i> , B. B. Sparks.

*First Year*

<i>President</i> , F. G. S. Christie.	<i>Secretary</i> , Miss E. D. Winchester.
<i>Vice-President</i> , W. A. Neal.	<i>Treasurer</i> , H. D. Barner.

## STUDENT CHRISTIAN ASSOCIATION

*President*, N. L. Murray.*Secretary*, F. A. Clift.*Vice-President*, W. G. Young.*Treasurer*, H. Hethrington.*Representatives**Sixth Year*, D. A. Wyke.*Third Year*, F. A. Clift.*Fifth Year*, H. F. P. Grafton.*Second Year*, H. Hethrington.*Fourth Year*,*First Year*, V. O'D. King.

## WOMEN'S STUDENT CHRISTIAN ASSOCIATION

*President*, Miss R. K. Haight.*Secretary*, Miss M. H. Grant.*Vice-President*, Miss G. A. Campbell.*Treasurer*, Miss M. J. Newman.

## WOMEN'S UNDERGRADUATE ASSOCIATION

*President*, Miss G. E. Mulock.*Senior Representative*, Miss R. A.*Vice-President*, Miss D. J. McCullough.

Johnstone.

*Secretary*, Miss H. L. Vanderveer.*Junior Representative*, Miss M. K.*Treasurer*, Miss S. P. Abidh.

Patterson.

## FACULTY OF APPLIED SCIENCE AND ENGINEERING SOCIETIES

### THE ENGINEERING SOCIETY

<i>President</i> , T. E. Bingham.	<i>Mining and Metallurgical Club Representative</i> , W. C. Martin.
<i>First Vice-President</i> , A. C. Lee.	
<i>Second Vice-President</i> , M. R. Scriven.	<i>Mechanical and Electrical Club Representative</i> , W. E. Weaver.
<i>Treasurer</i> , A. M. Grant.	
<i>Secretary</i> , H. D. Gracey.	<i>Architectural Club Representative</i> , R. S. Hanks.
<i>Curator</i> , I. C. Hardy.	
<i>Fourth Year President</i> , G. L. DeLaplante.	<i>Chemical Club Representative</i> , J. G. Anderson.
<i>Third Year President</i> , W. A. Duncan.	<i>Debating Club Representative</i> , W. G. Raymore.
<i>Second Year President</i> , J. W. Deacon.	<i>Athletic Association Representative</i> , A. G. Ballachey.
<i>First Year President</i> , N. D. Adams.	
<i>Civil Club Representative</i> , D. G. McCrone.	<i>Student Christian Association Representative</i> , G. B. Smith.

### ATHLETIC ASSOCIATION

<i>Honorary President</i> , Professor T. R. Loudon, B.A.Sc.	<i>Fourth Year Representative</i> , C. A. Morrison.
<i>President</i> , A. G. Ballachey.	<i>Third Year Representative</i> , E. J. Calnan.
<i>Vice-President</i> , J. M. Goss.	<i>Second Year Representative</i> , A. E. Dymont.
<i>Secretary-Treasurer</i> , J. H. P. Russell.	<i>First Year Representative</i> , H. A. Sniderman.

### DEBATING CLUB

<i>Honorary Chairman</i> , Professor W. J. T. Wright, M.B.E., B.A.Sc.	<i>Third Year Representative</i> , R. R. Peterson.
<i>Chairman</i> , W. G. Raymore.	<i>Second Year Representative</i> , A. W. Davison.
<i>Vice-Chairman</i> , J. H. M. Jones.	
<i>Secretary-Treasurer</i> , G. B. Smith.	<i>First Year Representative</i> , K. I. Joyner.
<i>Fourth Year Representative</i> , F. H. Vercoe.	

## CIVIL CLUB

<i>Honorary Chairman</i> , Professor P. Gillespie, B.A.Sc., C.E., M.Sc.	<i>Fourth Year Representative</i> , R. J. Burnside.
<i>Honorary Vice-Chairmen</i> , Professor T. R. Loudon, B.A.Sc., Professor C. R. Young, C.E.	<i>Third Year Representative</i> , T. L. Sanderson.
<i>Chairman</i> , D. G. McCrone.	<i>Second Year Representative</i> , C. T. Anderson.
<i>Vice-Chairman</i> , H. C. Smith.	<i>First Year Representative</i> , K. J. Joyner.
<i>Secretary-Treasurer</i> , P. W. Geldard.	

## MINING AND METALLURGICAL CLUB

<i>Chairman</i> , W. C. Martin.	<i>Third Year Representative</i> , W. E. Johnston.
<i>Vice-Chairman</i> , H. Fraser.	<i>Second Year Representative</i> , J. Annesley.
<i>Secretary-Treasurer</i> , L. A. Howard.	<i>First Year Representative</i> , E. W. Jones.
<i>Fourth Year Representative</i> , W. S. Hargraft.	

## MECHANICAL AND ELECTRICAL CLUB

<i>Honorary Chairman</i> , Professor R. W. Angus, B.A.Sc.	<i>Treasurer and Third Year Representative (Mechanical)</i> , B. S. Shenstone.
<i>Honorary Vice-Chairmen</i> , Professor J. H. Parkin, M.E., Professor A. R. Zimmer, B.A.Sc.	<i>Second Year Representative (Electrical)</i> , C. W. Woodside.
<i>Chairman</i> , W. E. Weaver.	<i>Second Year Representative (Mechanical)</i> , J. E. Hunton.
<i>Vice-Chairmen</i> , C. B. Pitt, C. A. Morrison.	<i>First Year Representative (Electrical)</i> , E. T. Burns.
<i>Secretary and Third Year Representative (Electrical)</i> , A. E. S. Bolton.	<i>First Year Representative (Mechanical)</i> , A. G. Strohan.

## ARCHITECTURAL CLUB

<i>Honorary Chairman</i> , J. A. Pearson, Esq.	<i>Treasurer</i> , C. H. Brooks.
<i>Chairman</i> , R. S. Hanks.	<i>Representatives</i> , G. S. Adamson
<i>Vice-Chairman</i> , Miss E. M. Lalor.	( <i>Third Year</i> ), J. H. A. Collins
<i>Secretary</i> , A. W. Davison.	( <i>Second Year</i> ), W. A. Smith ( <i>First Year</i> ).

## INDUSTRIAL CHEMICAL CLUB

<i>Honorary President</i> , Professor J. W. Bain, B.A.Sc.	<i>Secretary-Treasurer</i> , W. D. Irwin.
<i>Honorary Vice-President</i> , Professor E. G. R. Ardagh, B.A.Sc.	<i>Curator</i> , G. Mason.
<i>President</i> , J. G. Anderson.	<i>Representatives</i> , M. O. Thompson
<i>Vice-President</i> , G. R. Connor.	( <i>Fourth Year</i> ), R. Hayes ( <i>Third Year</i> ), J. Keith ( <i>Second Year</i> ), R. M. Ferguson ( <i>First Year</i> ).



## ONTARIO COLLEGE OF EDUCATION

## CLASS EXECUTIVE

<i>Honorary President</i> , Professor J. O. Carlisle, M.A.	<i>Vice-President</i> , Miss H. G. Agnew, B.A.
<i>President</i> , C. M. McCallum, B.A.	<i>Secretary</i> , Miss G. R. Ferrier, B.A.
	<i>Treasurer</i> , G. K. D. Alderson, B.A.

## ATHLETIC COMMITTEES

*Men's*

L. H. Colbeck, B.S.A.	V. T. Elton, B.S.A.
W. P. Horwood, B.A.	C. E. Eastman, B.A.

*Women's*

Miss M. M. Scott, B.A.	Miss U. Kelso, B.A.
Miss E. I. Kennedy, B.A.	Miss R. M. Hazlewood, B.A.

## LITERARY COMMITTEE

Miss B. B. Billings, B.A.	J. R. MacGillivray, B.A.
Miss J. A. B. Maitland, B.A.	K. J. Shaver, B.A.

## DRAMATIC COMMITTEE

Miss F. L. Leggett, B.A.	J. E. D. Durrant, B.A.
Miss R. M. Anderson, B.A.	W. R. Watson, M.A.

## SOCIAL COMMITTEE

Miss H. M. Reid, B.A.	W. G. Doidge, B.A.
Miss K. J. Krug, B.A.	H. K. Blair, B.A.

## EX-OFFICIO MEMBERS

C. S. Patterson, B.A.	Miss M. C. Lewis, B.A.
I. W. Mix, B.A.	Miss N. L. Hanson, B.A.
K. P. Watson, B.A.	Miss H. O. Brett, B.A.

## STUDENTS' ADMINISTRATIVE COUNCIL REPRESENTATIVES

Miss M. K. Norris, B.A.	C. S. Patterson, B.A.
-------------------------	-----------------------

## FACULTY OF FORESTRY

## THE FORESTERS' CLUB

<i>President</i> , W. E. Gimby.	<i>First Year Representative</i> , R. T. G. Graham.
<i>Vice-President</i> , J. W. Johnson.	<i>Students' Council Representative</i> , L. R. Seheult.
<i>Secretary</i> , R. F. Goodall.	<i>Torontonensis Representative</i> , W. E. Steele.
<i>Treasurer</i> , S. H. Francis.	

## ATHLETIC ASSOCIATION

<i>President</i> , D. M. Parker.	<i>Treasurer</i> , C. H. Bastock.
<i>Secretary</i> , D. McLaren.	<i>Ex-officio Member</i> , M. A. Adamson.

## SCHOOL OF GRADUATE STUDIES

## GRADUATE STUDENTS' UNION

<i>Hon. President</i> , G. S. Brett, M.A.	<i>President</i> , N. D. Clare.
<i>Hon. Secretary</i> , Miss N. MacKenzie.	<i>Treasurer</i> , M. M. Westington.

# INDEX

	PAGE	P.
Accounting.....	258	Art.....304,
Actuarial Science.....	271	Arts, Faculty of.....
Administrative Officers.....	9	Academic Standing, Condi-
Admission ad eundem statum,		tions for.....
Applied Science.....	486	Admission.....93,
Admission ad eundem statum,		Courses for the Degree..152,
Arts.....	157	Courses of Graduate Study..
Aerodynamic Laboratory.....	583	Courses of Instruction.....
Affiliated Colleges.....	877	Examinations.....160,
Agriculture, Curriculum, etc.		Faculty in.....
.....132, 641, 866		Fees.....
Albert College.....	387	General Information.....
Alma College.....	388	List of Students in...App.
Alumni Federation.....App.	112	Matriculation.....93,
Anaesthesia.....	778	Physical Training.....
Anatomical Building.....	475	Prescription for Courses...
Anatomy.....290, 446, 732, 768		Prizes, Medals, Scholarships
Ancient Oriental History.....	233	and Fellowships.....
Annesley Hall.....	176	Registration and Enrolment
Anthropology.....258, 742		Regulations.....
Applied Chemistry.....	769	Students on Probation.....
Applied Mechanics.....	532	Assaying.....540,
Applied Science, Faculty of...483		Assistant Professors, List of...
Admission.....97, 486		Assistants, Class and Research
Degrees.....487, 577		.....70,
Departments.....	508	Associate Professors, List of..
Examinations.....	498	Associates, List of.....
Faculty.....	27	Associations.....App.
Fees.....	488	Astronomy.....272, 544,
General Information.....	503	Athletic Association
Graduating Departments...507		.....178, 505, App.
Historical Sketch.....	484	Bacteriology.....465, 735,
Instructorships, Junior....497		B.A., Degree of.....152,
Laboratory Equipment....581		B.Arch., Degree of.....
Matriculation.....97, 485		B.A.Sc., Degree of.....
Scholarships and Prizes....489		Banting and Best Chair of
Students, List of.....App. 40		Medical Research.....
Students' Societies, 505, App. 137		B. Comm., Degree of.....
Term Work.....500		B.H.Sc., Degree of.....
Archaeology.....304, App. 74		Biochemistry 291, 444, 607, 732,
Architecture, Department of		Biological and Medical Sciences
.....519, 536		.....95,
Argyll House.....	176	

PAGE	PAGE
Biology . . . 95, 147, 281, 337, 441 545, 607, 727, 771	Council of the Faculty of Arts ..... 13, 88
Board of Governors . . . . . 21, 86	Council of University College 13, 89
Botany . . . . . 148, 286, 608, 729	Councils, Students' Adminis- trative . . . . . 178, 505, App. 113
B.Paed., Degree of . . . . . 366, 654	Crown, The . . . . . 86
B.S.A., Degree of . . . . . 866	
B.Sc. (Dent.), Degree of . . . . . 802	Daughters of the Empire Over- seas Scholarship . . . . . 223
B.Sc. (Med.), Degree of . . . . . 413	D.D.S., Degree of . . . . . 747
B.Sc.F., Degree of . . . . . 658	Debating Union, Women Re- presentatives to . . . . . App. 122
Bursaries . . . . . 112, 114, 202, 425, 493	Demonstrators, List of . . . . . 49, 70
Burwash Hall . . . . . 176	Demonstratorships, etc. . . . . 702
Business Administration . . . . . 550	Dental Anatomy . . . . . 776
B.V.Sc., Degree of . . . . . 870	Dental Praxis . . . . . 777
	Dental Surgery . . . . . 778
Calendar . . . . . 12, 13	Dental Technology . . . . . 780
Cambridge, University of . . . . . 182	Dentistry, Faculty of . . . . . 102, 472, 745
Caput . . . . . 89	Admission . . . . . 747
C.E., Degree of . . . . . 487, 577, 693	Curriculum . . . . . 765
Cement Testing Laboratory . . . . . 592	Degrees . . . . . 747, 802
Ceramics . . . . . 570	Dental Nurses' Course . . . . . 819
Certificates, Provincial . . . . . 160	Dental Practitioners' Course 804
Chem. E., Degree of . . . . . 487, 577, 693	Estimate of Expenses . . . . . 763
Chemical Engineering, Depart- ment of . . . . . 522	Examinations . . . . . 755
Chemical Laboratories . . . . . 586	Fees . . . . . 760, 803
Chemistry . . . . . 95, 146, 294, 341, 435, 540, 608, 737, 772	General Information . . . . . 808
Chemistry, Mineralogy and Geology . . . . . 95, 342	Licence . . . . . 815
Chess Club . . . . . App. 121	Matriculation . . . . . 102, 747
Ch.M., Degree of . . . . . 421, 692	Registration . . . . . 750
Civil Engineering, Department of . . . . . 508	Regulations . . . . . 753
Classics . . . . . 94, 108, 110, 225, 312, 642, 706	Scholarships . . . . . 800
Clinical Dentistry . . . . . 773	Students, List of . . . . . App. 59
Commencement date . . . . . 19	Text-Books . . . . . 795
Commerce and Finance (B.Comm.) . . . . . 95, 349	Descriptive Geometry . . . . . 556
Commerce Club . . . . . App. 122	Diploma of Public Health Nursing . . . . . 834
Comparative Dental Anatomy 771	Diploma of Radiology . . . . . 432
Connaught Laboratories . . . . . 472	Diploma of Social Service . . . . . 823
Constitution and Administra- tion of the University . . . . . 86	Discipline . . . . . 479
Contents, Table of . . . . . 3	Dominion Dental Council of Canada . . . . . 818
Convocation, Functions of . . . . . 88	D.Paed., Degree of . . . . . 367, 655, 695
C.O.T.C. . . . . 179, App. 116	D.P.H., Degree of . . . . . 430
	Drawing . . . . . 781
	D.V.Sc., Degree of . . . . . 871

	PAGE
Economics.....	251, 550
Education, Science of.....	632
Education, The Ontario Col- lege of.....	613
Admission....	617, 623, 626, 629, 650
Certificates, Diplomas ...	621, 622, 624, 628, 630, 653
Courses.....	615
Degrees.....	654
Examinations ...	620, 624, 627, 629, 652
Fees.....	623, 626, 629, 650
Fellowships.....	656
Instructors, List of...	85
Students, List of.....	App. 47
Students' Societies....	App. 139
Educational Theory.....	722
Edward Kylie Award.....	222
E.E., Degree of.....	487, 577, 693
1851 Exhibition Science Re- search Scholarship.	216, 495, 662
Electrical Engineering, Depart- ment of .....	525
Electricity.....	552, 585
Electrochemical Laboratories.	587
Engineering Drawing.....	556
Engineering Physics.....	559, 584
Engineering Research, School of .....	576
English...	111, 119, 136, 233, 443, 610, 634, 711, 781
English and History..	94, 321, 635
Entrance at the Second Year, Arts.....	157
Entrance to the various Years,	
Equivalent Examinations	103, 160
Ethics.....	260
Events of the Session....	App. 110
Examinations:	
Agriculture.....	869
Applied Science and Engi- neering.....	498
Arts.....	168
Dentistry.....	755
Education....	620, 624, 627, 629, 652

	PAGE
Equivalent.....	103, 160
Forestry...	661
Household Science.....	601
Law.....	852, 856
Matriculation.....	103
Medicine .....	414
Music. . . . .	678
Pharmacy...	865
Public Health Nursing...	841
Veterinary Science.....	871
Experimental Science.....	130
Extension Courses...	161, 356, 430, 846
Lectures...	App. 92
Students in .....	App. 27
Faculty Councils.....	13, 88
Faculty of the University...	27
Faculty Union...	App. 113
F.E., Degree of.....	658, 697
Federated Colleges.....	89, 877
Federation Scholarship.....	223
Fees:	
Agriculture.....	869
Applied Science.....	488
Arts.....	184
Dentistry.....	760, 803
Education...	623, 626, 629, 650
Forestry. ....	659
Graduate Studies.....	698
Hart House.....	185
Household Science.....	599
Law.....	856
Matriculation .....	104
Medicine.....	403
Music.....	678
Pharmacy. . . . .	865
Public Health Nursing .	840, 844
Social Service.....	828
Summer Session.....	357
Veterinary Science.....	872
Fellowships.....	202, 422, 700
Fellows, List of.....	70
Food Chemistry.....	292, 607, 735
Forestry, Faculty of.....	100, 657
Curriculum.....	664
Entrance.....	658

	PAGE		PAGE
Examinations.....	661	History, Greek and Roman	
Fees.....	659	.....	230, 708
Matriculation.....	100, 658	Honour Courses.....	153, 312
Regulations.....	662	Honour Matriculation.....	106, 135
Scholarships and Bursaries ..	661	Honour Science Club.....	App. 122
Students, List of.....	App. 52	Hospital for Sick Children ..	477
Students' Societies.....	App. 140	Hospitals.....	476
French 111, 121, 139, 239, 611, 643		Household Economics ..	95, 347
French, Greek and Latin ..	94, 318	Household Science.....	95, 134,
		300, 346, 605, 645, 741, App. 45	
General Hospital.....	476	Faculty of.....	99, 595
Geodesy.....	544	Hutton House.....	175
Geography.....	639	Hydraulics ..	562, 582
Geology.....	207, 560, 738, App. 76	Hydro-Electric Power, Ad-	
Geology and Mineralogy		vanced course in.....	577
.....	95, 344, 592	Hygiene.....	469, 472, 740
Geology and Palæontology.....	297, 738		
German.....	111, 121, 139,	Instruction, Officers of.....	27
237, 611, 643, 714		Instructors, List of.....	70
German Club.....	App. 122	Instructors, Ontario College of	
Governors, Board of.....	21, 86	Education, List of.....	85
Graduate Students' Union		Instructorships, Junior.....	497
.....	703, App. 140	Internes.....	478
Graduate Studies, School of ..	683	I.O.D.E. Scholarship.....	223
Courses of Study.....	705	Italian.....	122, 140, 242
Fees.....	698		
Fellowships.....	700	John H. Moss Memorial Fund..	219
Students, List of.....	App. 54	John McCrae Scholarship ..	112
Students' Societies ..	App. 140		
Greek.....	110, 118, 135, 226, 642, 707	Knox College.....	880
Greek and Hebrew.....	313		
Greek and Roman History.....	230, 708	Laboratory Equipment,	
Gynæcology.....	460	Faculty of Applied Science ..	581
		Latin' 110, 118, 136, 228, 642, 707	
Hart House.....	171, 504, App. 113	Law.....	256, 849
Hart House Theatre .....	172,	Examinations.....	852, 856
505, App. 121		Prizes.....	860
Heat Engines.....	564	Lecturers, List of .....	49
Hebrew.....	231, 709	Lectures, Arts and Medicine,	
Hebrew and Ancient History ..	316	date.....	14
High School Assistant, Certi-		Leonard Scholarship.....	223
ficate for.....	180, 579, 615	Library .....	170, 474
Highway Laboratory.....	591	Licence, Dental .....	815
Histology.....	782	Licence, Medical.....	418
Historical, University and		LL.B., Degree of.....	850
Colleges.....	App. 69	LL.M., Degree of .....	858
History.....	122, 140, 245, 635, 715	Logic.....	260

PAGE	PAGE
Loretto Abbey College . . . . . 178	Graduate Courses . . . . . 420, 429
McCharles Prize . . . . . 218, 494	Instruction . . . . . 407
M.A., Degree of . . . . . 689	Licence . . . . . 418
Machinery . . . . . 566	Matriculation . . . . . 96, 400
M.Arch., Degree of . . . . . 487, 577, 693	Options . . . . . 407
M.A.Sc., Degree of . . . . . 487, 577, 693	Prizes, etc. . . . . 427
Mathematical and Physical	Public Health, Diploma of . . . 430
Society . . . . . App. 121	Radiology, Courses in . . . 432, 470
Mathematics 95, 108, 111, 126,	Registration . . . . . 402
141, 267, 330, 568, 608, 636, 724	Regulations . . . . . 480
Mathematics and Physics . . 95, 332	Students, List of . . . . . App. 32
Matriculation . . . . . 91	Students' Societies, 481, App. 135
Examinations . . . . . 103	Subjects of Instruction . . . 410
Fees . . . . . 104	Menorah Society . . . . . App. 122
Prescription of Courses . . . 118	Metallurgical Engineering,
Scholarships . . . . . 105	Department of . . . . . 528
M.B., Degree of . . . . . 400	Metallurgy . . . . . 569, 588, 769
M.D., Degree of . . . . . 420, 681, 691	Met.E., Degree of . . . . . 487, 577, 693
Mechanical Engineering, De-	Metrological Laboratory . . . 592
partment of . . . . . 516	Military Studies . . . . . 304
Mechanical Laboratory . . . . 581	Mineralogy . . . . . 299, 571, 739,
Mechanics . . . . . 271	App. 75
Mechanics of Materials . . . . 590	Mining . . . . . 540, 588
M.E., Degree of . . . . . 487, 577, 693	Mining Engineering, Depart-
Medals, Arts, University and	ment of . . . . . 518
Colleges, 198, 373, 384, 393, 397	Modern History . . . . . 95, 323
Medals	Modern Languages . . . . . 94, 108,
Medicine . . . . . 427	111, 320, 573
Medical Jurisprudence . . . . 470	M.S.A., Degree of . . . . . 696
Medical Research, Chair of . . . 471	M.Sc. (Dent.), Degree of . . . 697, 803
Medicine, Faculty of . . . . . 96, 399	Mus. Bac., Degree of . . . . . 674
Arts and Medicine . . . . . 413	Mus. Doc., Degree of . . . . . 681
B.Sc. (Med.) Course . . . . . 413	Museum . . . . . 171, 475, App. 73
Buildings . . . . . 473	Archæology . . . . . App. 74
Courses of Instruction . . . . . 435, 450	Geology . . . . . App. 76
Dentistry, Lectures in . . . . . 472	Mineralogy . . . . . App. 75
Entrance . . . . . 96, 400	Palæontology . . . . . App. 77
Equivalent Examinations . . . 401	Zoology . . . . . App. 78
Examinations . . . . . 414	Music, Faculty of . . . . . 101, 673
Faculty in . . . . . 27	Course in . . . . . 125, 674
Fees . . . . . 403	Examinations . . . . . 678
Fellowships, Scholarships,	Fees . . . . . 678
and Bursaries . . . . . 422	Matriculation . . . . . 101, 674
General Information for	Students, List of . . . . . App. 53
Students . . . . . 479	Music, Vocal . . . . . 644
	Obstetrics . . . . . 460

	PAGE		PAGE
Occasional Students...	156, 189	Physical Training...	160, 479, 573, 598, 645, 664, 759
Officers of Instruction .....	27	Curriculum in.....	873
Ontario Agricultural College..	884	Physics.....	95, 145, 273, 336, 436, 609, 725, 769, 787
Ontario Board of Health, Laboratory of .....	591	Physics and Chemistry....	95, 334
Ontario College of Pharmacy..	883	Physiology..	293, 443, 609, 734, 790
Ontario Hockey Association War Memorial Scholarship..	113	Physiology and Biochemistry .....	95, 339
Ontario Veterinary College...	887	Political Economy.....	251, 609
Operative Dentistry.....	783	Political Science.....	95, 324, 717
Ophthalmology.....	462	Portraits.....	App. 80
Ore Dressing.....	540, 588	Prescription for Courses, Arts..	306
Oriental Languages, 230, 314,	709	Preventive Dentistry.....	791
Orthodontia.....	786	Preventive Medicine.....	469, 740
Oto-Laryngology.....	462	Prizes:	
Oxford, University of.....	182	Applied Science.....	489
Pædiatrics.....	453	Arts, University and Col- leges..	192, 373, 384, 393, 397
Palæontology...297, 738, App.	77	Law.....	860
Pass Course.....	94, 152, 306	Medicine... ..	427
Pass Matriculation .....	92	Probation.....	158
Curriculum.....	118	Professional Degrees (Applied Science).....	487, 577
Equivalent Examinations... 103		Professores Emeriti, List of ...	27
Fees.....	104	Professors, List of.....	28
Scholarships.....	105	Prosthetic Dentistry.....	791
Pathological Building.....	474	Psychiatry.....	463
Pathological Chemistry...468, 736		Psychology.....	95, 265, 330, 721
Pathology.....465, 735, 782		Public Health Nursing, Dept. of.....	831
Pearson Kirkman Marfleet Lectureship.....	181	Students, List of.....	App. 65
Pedagogy.....357, 654		Public Speaking.....	793
Periodontology.....	786	Queen's Hall.....	175
Petrography.....	299	Radiology.....	433, 470
Pharmacy and Pharmacology .....449, 742, 787		Registrars .....	9, 10
Pharmacy, Curriculum, etc... 864		Registration and Enrolment in Arts.....	157
Ph.D., Degree of.....579, 687		Religious Knowledge.....	302, 370
Ph.D., Theses for Degree..App. 84		Repeating the Year, Arts....	168
Philology.....	708	Residences, Men's..173, 175, 176, 177	
Philosophy. . .95, 259, 326, 609, 611, 719		Residences, Women's.175, 176, 177	
Philosophy (English or History Option).....	95, 328	Revenues of University.....	89
Phm.B., Degree of.....	864	Rhodes Scholarship.....	220, 491
Phonetics.....	245		
Photographic and Projection Laboratories.....	585		



	PAGE		PAGE
Romance Language.....	712	Students' Administrative	
Royal Ontario Museum. .171,		Council.....	178, 505, App. 113
475, App. 73		Students, List of	
Sanskrit. ....	708	Applied Science....	App. 40
Scholarships:		Arts.....	App. 2
Applied Science and Engi-		Dentistry .....	App. 59
neering.....	489	Education.....	App. 47
Arts, University and Col-		Extension.....	App. 27
leges....106, 202, 373,		Forestry.....	App. 52
384, 393, 397		Graduate Studies....	App. 54
Dentistry.....	800	Household Science....	App. 45
Forestry.....	661	Medicine.....	App. 32
Household Science.....	602	Music.....	App. 53
Matriculation.....	105	Public Health Nursing..	App. 65
Medicine.....	422	Social Service.....	App. 63
Public Health Nursing.....	841	Students, Registration and	
Social Service.....	828	Enrolment, Date of.....	13
School Management and Law..	633	Students, Summary of Lists	
Science....95, 109, 112, 130,		.....	App. 68
336, 639		Summer Session.....	355
Sciences, General.....95, 345		Surgery.....	456, 793
Semitic Languages.....	709	Surveying.....	573
Senate:		Teachers' Course .....	161, 356
Constitution, Functions, etc.	86	Term Work.....	166, 500
Meetings, date.....	13	Terms, Date of.....	13
Members.....	22	Text Books.....	795, 848
Shop Work.....	500	Theatre, Hart House....	172, 505
Social Service, Dept. of, Cur-		Therapeutics.....	455
riculum, etc.....	821	Thermodynamic Laboratory..	581
Students, List of.....	App. 63	Theses... 501, 576, 852, 856,	
Societies.....	App. 112	868, App. 84	
Spanish.....122, 139, 244, 643		Time-Table, Arts, Pass Course.	308
Special Matriculation Condi-		Toronto General Hospital....	476
tions.....	102	Toronto Psychiatric Hospital..	477
Specialists' Certificate....180,		Toronto Western Hospital....	477
356, 580, 615		<i>Torontonensis</i> .....	App. 116
St. Hilda's College....177,		Toxicology.....	450
392, App. 132		Trinity College.....	170, 391
St. Joseph's Convent .....	178	Faculty.....	27
St. Michael's College..170, 177, 395		Prizes, Medals, Scholarships	
Residences.....	177, 178	.....	107, 392
Scholarships and Prizes....	397	Residences.....	177
Student Societies.....	App. 134	Students' Societies....	App. 112
St. Michael's Hospital.....	477	University College.....	170, 369
Student Christian Association		Council .....	89, 370
.....	App. 116	Discipline .....	370

	PAGE		PAGE
Prizes, Medals and Scholarships.....	107, 369, 373	Senate.....	380
Regulations, etc.....	372	Students' Societies ..	App. 126
Residences .....	175	Women's Union ..	173
Student Societies.....	371, App. 123	Victoria University .....	882
Women's Union ..	172	War Memorial Scholarships .....	219, 494, 616, 661, 800
University Extension ....	App. 27	William Hardie Scholarship ..	114
<i>Varsity, The</i> ..	App. 115	Women Students' Administrative Council.....	178, App. 115
Veterinary Science, Curriculum in.....	870	Women's Athletic Association .....	179, App. 115
Victoria College.....	170, 375	Women's Press Association .....	App. 116
Administrative Officials ..	380	Women's Unions.....	172, 173
Affiliated Colleges.....	387	Wycliffe College....	878
Faculty .....	27	Zoology....	147, 282, 442, App. 78
Medals, Prizes, Scholarships.....	107, 384	Zymology .....	731
Regents, Board of ..	379		
Regulations, etc.....	381		
Residences.....	176, 383		